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ABSTRACT

A total of 47 papers representing the broad research and extension interests related to rural areas are included in this volume. The 13 sessions are entitled Rural Structure and Process, Industrialization, Migration, Health and Alcohol, Quality of Life, Occupations and Work, Applied Sociology, Education, Network Analysis, Poverty, Status Aspirations and Attainments, Potpourri, and Consumers. The Education session includes three papers: Two Paths into Home Economics: A Study of Black and White Women in 1890 and 1862 Land Grant Universities: Southern Urban Aggies: A Preliminary Look: and Student Achievement Test Scores in Alabama: Rural and Urban Schools. The Potpourri session includes four papers: Orientations Toward International Service; Factors Associated with Interaction Patterns Between College Students and Grandparents; Rural Sociology in the 1980's; and The Criteria Dilemma and Evaluating Extension Programs. The final portion of the document includes minutes of the business meeting, the program for the entire meeting, and a list of the participants. (AN)

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RURAL SOCIOLOGY IN THE SOUTH: 1980

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PROCEEDINGS
RURAL SOCIOLOGY SECTION

SOUTHERN ASSOCIATION
OF AGRICULTURAL SCIENTISTS
(SAAS)

Hot Springs, Arkansas
February 3-6, 1980

Edited by:

Wolfgang Frese
**Department of Sociology
and Rural Life
Mississippi Agricultural and
Forestry Experiment Station
Mississippi State University
Mississippi State, Mississippi**

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RURAL SOCIOLOGY IN THE SOUTH: 1980

PROCEEDINGS

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FOREWORD

Rural Sociology in the South: 1980 is a collection of papers which were submitted from the 1980 meetings of the Rural Sociology Section of the Southern Association of Agricultural Scientists. These papers indicate the broad research and extension interests related to rural areas.

The sessions included in the Table of Contents appear in the same order as did in the program. The titles of the papers for each section appear as they did on the program. If there are minor variations with the actual paper titles, they were made by the authors after the program was printed. These Proceedings also contain a copy of the 1980 Rural Sociology Section program, the minutes of the 1980 business meeting, and a list of the registrants.

The Rural Sociology Section officers express their appreciation to all those who participated in the 1980 meetings. Special appreciation is also expressed to Candy Broyles and Virginia McCarter for their assistance in preparing and compiling the proceedings. We also wish to acknowledge the assistance of the Department of Sociology and Rural Life at Mississippi State University as well as the support of the Mississippi Agricultural and Forestry Experiment Station in the production and distribution of *Rural Sociology in the South: 1980*.

Wolfgang Frese
Program Chairman

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TRENDS IN THE MEASUREMENT OF COUNTY AGRICULTURAL STRUCTURE[1]

Ronald C. Wimberley

Department of Sociology and Anthropology
North Carolina State University

ABSTRACT

Comparisons of factors from 14 indicators of county agricultural structure reported in the 1969 and 1974 Censuses of Agriculture show three factored dimensions to be adequate for each period. However, these obliquely rotated dimensions are not interpretable the same way in 1974 as they were in 1969. Since differences in research techniques for the two factorings are eliminated by this analysis, the dimensional differences appear to be the result of true change. In other words, the dimensions of agricultural structure themselves are changing. Therefore, the underlying structure of county agriculture may be quite transitory. This is of importance to researchers who try to measure agricultural structure and relate it to causes and consequences. It is also important to policy makers who may attempt to alter the course of these changes in county agricultural systems.

DIMENSIONAL STABILITY AND CHANGE

This study brings together two previous dimensional analyses of county level agricultural structure (Wimberley and Belyea, 1978; 1979). The purpose is descriptive. It seeks information useful for the systematic measurement of structural dimensions that may be used in future analyses of the causes, consequences, and policy implications of structural changes in agriculture.

If a consistent set of structural dimensions can be determined, then it remains to be seen how county units change on them across time. Of course the same is the case for structural dimensions of individual farm units. At this time, however, it is not known whether even the same types of dimensions of agricultural structure can be found to hold over different time intervals. This knowledge is basic and prior to the discovery of any changes county or farm units make on particular dimensions. For example, we do not know whether dimensions A, B, and C found in one decade will remain until a later decade or whether they might reappear as dimensions

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[1] This research is a contribution of USDA SEA/CR Regional Project S-148, "Changing Structure of Agriculture: Causes, Consequences, and Policy Implications," through the North Carolina Sgricultural Research Service Project 11148.

C, D, and E. In such an instance, it could be meaningful only to trace changes on dimension C since A, B, D, and E would not be present at both points of time in order to establish specific trends.

In fact, the two earlier dimensional analyses have resulted in just this kind of situation. Using the 1969 United States Census of Agriculture for North Carolina counties, three factors were found to adequately fit 11 indicators of structural conditions. Oblique rotations of these factors gave dimensions of I. labor resources, II. independent vs. part-ownership, and III. full- and part-owner operations vs. tenancy (Wimberley and Belyea, 1978). Three factors likewise fitted 18 indicators of agricultural structure for the same counties as reported in the 1974 Census of Agriculture. But this time, they were interpreted as I. independently owned and operated vs. partner owned and tenant operated farms, II. scale of operation, and III. labor resources (Wimberley and Belyea, 1979).

Therefore, the same dimensions were not consistently evident for the two periods. The question is: Are these differences due to true change in the underlying nature of county agricultural structure or are they an artifact of the research techniques? Certainly changes in the structure of agriculture from the 1960's into the 1970's are anticipated on the basis of trends in farm numbers, sizes, mechanization, and many other single indicators. But, have such changes been salient enough to alter major structural dimensions themselves?

The pair of factorings in question did have many key similarities which might have otherwise accounted for the observed differences. Data were from the same collection source and the same counties. The same factoring, communality estimation, and rotation techniques were applied. On the other hand, there was a difference in seven indicators of the 18 used in 1974 and the 11 used in 1969. In addition, there was a difference in the way farms were defined in the 1969 and 1974 censuses.

The present analysis will attempt to hold these technical differences constant in order to better discern any actual changes in the nature of the structural dimensions due to true changes in county agricultural structure itself.

PROCEDURES

Data and Sampling. As noted, the data are taken from the United States Census of Agriculture for the counties of North Carolina as reported for the two consecutive data collections of 1969 and 1974. All but one of the 100 counties are examined. The exception is Dare County, a coastal area containing one very large farm, which is not reported in the census data because it would, in effect, disclose information on that particular farm. Since the variables relevant to structural conditions were all presented in the census tables for those farms with annual sales of $2,500 or more, only those farms meeting this sales threshold will be analyzed.

Structural Indicators. The 11 variables factored from the 1969 data were also among the 18 factored for 1974. By salvaging three other 1969 variables that were analyzed in 1974, a core of 14 indicators were available to compare both periods. Omitted for the 18 in 1974 were items on operator's principal occupation, the extent of off-farm income, farm debt, and number of farm laborers per county. Added to the 11 variables in 1969 were county farmland acreages, county values for farmland and buildings, and the number of operators residing on the farms.

The 14 core indicators may be placed into four categories. First is the scale of agriculture in the county unit measured by (a) acreage and (b) dollar value of the land and buildings.

Second is ownership. It is reported for (c) individuals or families hereafter referred to as independent farm owners, (d) partnerships, and (e) corporations.

Third is type of operation and operator characteristics. These include operation by (f) full-owners, (g) part-owners, and (h) tenants. Another indicator is whether the operator (i) resides on the farm.

Fourth is a set of indicators on human and machine labor resources. These are (j) the number of farms using hired labor, (k) the number of farms with contract labor, (l) the market value of farm machinery and equipment in a county, (m) the number of trucks used on farms, and (n) the number of tractors used on farms.

Measurement Techniques. As in the earlier analyses for 1969 and 1974, the dimensionality of these indicators is tested through principal axis factoring with communalities estimated by $|r|$ max and by the oblique, promax factor rotations.

And as before, the matrices of relationships from which the factors are extracted contain partial correlations rather than the zero-order r coefficients ordinarily factored. The reason for using partial r's is that the indicators correlate highly with the total number of farms in a county. For example, number of farms per county relates to its total farmland, number of owners of various types, amount of labor resources, etc.. The effect of this is to produce a dominant factor from the indicators' zero-order intercorrelations and should be considered as a dimension of agricultural structure in addition to those to be factored from partial correlations here. However, the effect of number of farms per county is to obscure other potentially relevant factors. This problem is discussed at greater length in the previously cited analyses. To overcome this obscurity, the principal axis factors are drawn from partial correlation matrices of the 1969 and 1974 indicators while controlling for total number of farms per county.

FINDINGS

Principal axis factoring criteria for the amount of common variance explained and for eigenvalue differences among unrotated factors indicated

TABLE 1. PROMAX ROTATED FACTORS OF 1969 AND 1974 AGRICULTURAL STRUCTURE*

		1969			1974		
		I	II	III	I	II	III
	14 Indicators	Scale and labor	Ownership**	Operation	Scale (with labor)	Ownership and operation	Labor
Scale	Acreage	.81			.94		
	Value	.83			.75		
Ownership	Individual/ Family		.94			.95	
	Partnership		-1.02***			-.97	
	Corporate			-.34	.42		
Operation/ Operator	Full-owner	-.40		.47		.58	
	Part-owner	.42		.72	.42		
	Tenant			-.85		-.79	
	Resident			.53	-.39	.62	.37
Labor resources	Farms with hired labor	.66			.40		.45
	Farms with contract labor	.72					.65
	Machinery value	.98			.79		
	No. of trucks	.86			.52		.66
	No. of tractors	.77			.49		.40

*Except for 1969 corporate ownership, only loading ≥ .35 are reported.

**Signs in Factor II of 1969 are reversed for consistancy in comparison to 1974 results and the ensuing correlation matrices among factors for both years.

***Loading of > 1.0 in oblique, promax rotation is < 1.0 in an orthogonal, varimax rotation.

that three factors were sufficient for the partial correlation matrices of the 14 variables in both 1969 and 1974. Consequently, the three factor solutions were rotated. The resulting loadings are shown in Table 1.

Despite the addition of three variables to the original 11 variables, the 1969 rotations provided essentially the same interpretations found previously. Therefore, these three factors may be regarded as I. scale of agriculture and labor resources, II. ownership, and III. type of farm operations. The major development is that the newly added scale variables are found to load with labor resources in the first factor. The ownership factor represents a polarity between counties with independently owned farms versus partner-owned and--to a lesser extent--corporate-owned farms. The operation factor suggests a dimension ranging from resident full- and part-owner operators to tenant operators.

Furthermore, the 14 variables from the 1974 census give a three-factor rotation and interpretation analogous to that found in the previous factoring of 18 variables for 1974. Here, these are labeled as I. scale of agriculture, II. ownership and operation types, and III. labor resources. In fact, most rotated loadings are within a decimal place of the 18 variable loadings.

Factor Comparisons Across Years. These remarkable likenesses of the 14 variable factorings with their earlier 11 and 18 variable counterparts indicate that the differences in the structural dimensions of county agriculture must be due to something other than the indicator variables and factoring techniques.

The 1969 scale and labor dimension splits into separate dimensions of scale (supplemented by labor) and labor resources (without scale) for the 1974 data. The 1969 dimensions for ownership and for operation merge into a single dimension in 1974. These general transitions are diagramed in Table 2.

TABLE 2. TRANSITIONS BETWEEN 1969 AND 1974 DIMENSIONS FOR 14 COMMON INDICATORS OF COUNTY AGRICULTURAL STRUCTURE

1969 Dimensions		1974 Dimensions
I. Scale and labor resources	→	I. Scale (with labor)
	↘	III. Labor resources
III. Operation (resident full- and part-owner operators vs. tenant operators)	→	II. Ownership and operation (resident independent owners with full-owner operations vs. partner-owners with tenant operations)
II. Ownership (independently owned vs. partnership owners)	↗	

Factor Correlations. The intercorrelations of factors within each set of dimensions help to further reveal the configurations of scale, ownership, operation, and labor resources in 1969 and 1974. These are offered in Table 3. Coefficients for both years round-off to moderate positive or negative coefficients in the .4's.

TABLE 3. CORRELATIONS AMONG ROTATIONS FOR 1969 (LOWER TRIANGLE) AND 1974 (UPPER TRIANGLE) FACTORS*

		1974		
		I	II	III
1969	I		-.45	.44
	II	-.37		-.41
	III	-.43	.48	

* Signs of coefficients for Factor II, 1969, are consistent with sign reflections noted in Table 1.

In 1969, large-scale farming and labor resources (I) was negatively related to independent farm ownership by individuals and families (II). On the other hand, large-scale, farm-labor counties (I) appeared disassociated from full- and part-owner operations (III). Finally, there is a positive link between independently owned farms (II) and full-owner operations (III).

For 1974, the presence of large-scale agriculture (I) is observed to occur in the relative absence of independent farm ownership and operation (II). In other words, small-scale county agriculture is more typical where farms are operated by independent owners. Of course, large-scale agriculture (I) is accompanied by supplies of human and mechanical labor (III). Conversely, these labor resources (III) are not characteristic of counties where independently owned and operated farms are common.

While these interfactor relationships are not particularly surprising, they reveal county profiles among these sets of empirically based dimensions.

DISCUSSION OF FINDINGS

Stability. It might have been expected that three dimensions of county agricultural structure in 1969 would be the same three found among the same variables by the same techniques for the same counties five years later. They aren't. The dimensions, themselves, change.

Through it all, however, some general similarities for both periods become at least vaguely apparent. First, counties with large acreages in agriculture and high values for farm real estate typically have part-owners who operate the farms. While these operators tend to be nonresidents, they have human and mechanized farm labor resources. The contrasting end of this dimension is characterized by resident, full-owner operators not having the more plentiful labor resources.

The second overall tendency is that the counties vary on the presence of independently owned and resident operated farms at one end of the continua with partner-owned and tenant-operated farms at the other. Although this pattern is summarized from the second and third dimensions in 1969, it converges into a single dimension by 1974. When the 1969 indicators are forced into a two factor solution, this range of ownership and operation types combines into a single factor while scale and labor resources remain intact in the other factor.

Change. Nevertheless, the lack of directly corresponding dimensions from 1969 to 1974 do suggest that underlying configurations of county agricultural characteristics may be subject to changes. And while one may be reasonably confident that these changes are not because of differences in the population of counties, dimensional techniques, indicators, and data sources, two more possibilities remain which might account for the differences. One is that the 1974 Census of Agriculture used a different definition of farm than it did in 1969. Second is that the counties underwent true changes in their dimensions of agricultural structure during the half-decade under investigation.

Consider first the matter of the change in the census definition of a farm. In 1969, a farm was taken to be a place where agricultural operations occurred during the year and where agricultural sales were normally expected to be at least $250 a year for places of 10 acres or less or at least $50 for larger places. This definition favored the inclusion of larger acreages although they may have yielded lower sales. The size limitations were abolished by the 1974 definition but the annually expected product sales were raised to $1,000. Consequently, the 1974 definition would seem to permit fewer farms.

Data on the state's total agricultural sales (United States Department of Commerce, 1974 Census of Agriculture, Vol. I, Part 33, p.ix), suggest that many small operators may have been eliminated from the 1974 count. But on the other hand, the population of farm units generating the total sales may have been represented fairly well in 1969 and in 1974.

For the North Carolina counties at hand, the total number of farms by the old definition was 119,386 in 1969 and 100,563 in 1974. The new definition showed 86,053 in 1969 and 91,280 in 1974. Of course, many of the 1969 farms were nonexistent by any definition in 1974. Other farms existing in 1974 were established after the 1969 tally.

The change in farm definitions is largely moot, however, because this analysis only pertains to farms with annual sales of $2,500 or more in either year. Since the $1,000 minimum sales criteria of the 1974 definition is well below the threshold for farms used in this study, the new definition should not meaningfully affect the factor comparisons. Although some numbers of farms undoubtedly crossed the $2,500 sales line in each direction between 1969 and 1974, no gross count is reported. The net change in $2,500 farms was from 65,714 in 1969 by the old definition to 62,473 in 1974 by the new definition. This is an average decline of about 33 farms per North Carolina county (1974 Census of Agriculture, Vol. I, Part 33, p. xiii) and is in line with long-term trends. Of course, any real changes in farm numbers are potentially legitimate sources of structural changes.

Therefore, it may be surmized that the population of North Carolina farms with sales of at least $2,500--and as used in this analysis--would not be appreciably altered by the 1974 farm definition requiring a $1,000 sales minimum.

This leaves open the alternative explanation that differences in the dimensions of agricultural structure may be indeed the result of actual changes in county agriculture from 1969 to 1974.

CONCLUSIONS

The potential for changes in structural dimensions of agriculture cannot be ignored by researchers or policy makers. For researchers, it is important to develop more adequate measures of agricultural structure so that there can be an empirical basis for the explanations and predictions of its causes and consequences. For policy makers, it would seem important to have more adequate measures of agricultural structure if its changes are to be directed or controlled.

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COUNTY DIFFERENTIATION AS A MEASURE OF COUNTY DEVELOPMENT*

Glenn C. McCann
North Carolina State University

INTRODUCTION

Several efforts using Guttman scaling procedures to assess the structural differentiation of communities and larger geographical entities have been reported during the past two decades (see, for example, P. Eberts, 1973; S. Sismondo, 1973; DeLuca, 1972; F. and R. Young, 1960, 1962; F. Schmidt, 1972; and R. Stuby, 1976). Stuby (1976:2) observes that ". . . differentiation as it is used with respect to social structure, refers to the social processes whereby qualitative changes occur in the structure and function of certain societal units resulting in the "development of the society." Stuby (1972:2) also notes that "the concept of differentiation is inherent in the positivistic organicism of Durkheim, Tönnies, Redfield, Becker and Sorokin." A similar theoretical orientation to this matter was put forward by Herbert Aurbach in 1955 in his effort to operationalize the concept "isolation" by using a Guttman scale in order to develop a classification schema of Kentucky counties. In fact, Aurbach's use of the Guttman scale may be the first use of this now widely used approach to get at what is now commonly referred to as "differentiation." Whatever, Aurbach writes, "The present paper

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*Presented at the annual meeting of the Rural Sociology Section of the Southern Association of Agricultural Scientists in Hot Springs, Arkansas. February 4, 1980.

[uses] the theoretical framework of the folk-urban continuum." Aurbach goes on to explain "[Folk-Urban] . . . is Redfield's terminology. Closely related concepts are Becker's "sacred-secular continuum," Odum's "folk-culture-state civilization," Tönnies' "gemeinschaft and gesellschaft," Loomis' adaptations of these concepts, Durkheim's "society with mechanical solidarity and society with organic solidarity," and Comtes' early "theological and positivistic societies" (Aurbach, 1955:142).

According to Kerry Byrnes (1979:4), "Generally, investigators studying differentiation have attempted to measure this variable as an 'emergent system-level property' for which 'indicators should be directly visible in the institutional structure' of the social system under study." This is true whenever Guttman scaling procedures are used. The entries in a Guttman scale typically are obtained by observation or interviewing to get an indication of the proposed scale properties. When observation and interviewing are not used, as is the case with most of the reported efforts to get Guttman scales of differentiation, the source of data is from secondary materials, that is, censuses, city and county data books, Dun and Bradstreet reports, etc. From whatever source, if a Guttman scale emerges, the investigator may infer the unidimensionality of the universe of content under investigation, assuming that the universe of content has been properly defined, of course.

THE PROBLEM

This paper is a part of a larger research in which the author and his colleagues are attempting to construct a schema in order to classify 280 counties in nine southeastern states. These 280 counties share the distinction of all having been classified (at least in their rural portions) as being in the lower fifty percent of all U.S. counties as regards their levels of living in 1950 (Steelman, et.al, 1979).

We intend utilizing Guttman scaling procedures to construct measures of county differentiation in business patterns in these counties over a more than two decade period. The data source desired for these analyses are County Business Patterns for a year in the 1950's and a year in the 1970's. If comparable data for these two years prove impossible to obtain, we shall use data from at least those two years between 1950 and 1970 in which comparable data are available.

The rationale promoting this effort is that socio-economic development (a kind of differentiation) proceeds on a cumulative basis, ordinarily, if it occurs at all. This generalization would appear to be a tenable one from all the literature cited, as well as uncited, which we have reviewed. Furthermore, our theoretical orientation and the relevant literature would appear to support the further generalization that underdeveloped areas as compared to developed areas tend to lack services and facilities.

By constructing scales to measure such differentiation, we hope not only to be able to classify any one of the 280 counties at, at least two time periods, according to its level of "development." Also, we hope to be able to show for any given county, or for all the counties in the universe, how change has taken place over time. Our ultimate purpose for such a schema is to determine if the patterns of interorganizational decision-making and interpersonal decision-making taking place in some 26 of these counties are related to such measures of development. This research then is a part of Regional Project S-120, "Social Organization for Development of Low-Income Counties."

Longitudinal Studies

Steelman, et.al., (1979, p. 3) have noted, that scale and index construction as regards longitudinal research present problems due to such things as "changes in the social situation" and "changes in methodological procedures."

Louis Guttman who developed "scalogram analysis" called attention to some of these problems inherent in longitudinal research as it relates to the scalogram procedure in a paper presented to the American Sociological Society in 1943:

> Scales are relative to time and to populations:
>
> a. For a given population of objects, a universe may be scalable at one time but not at another, or it may be scalable at two periods of time but with different orderings of objects and categories.
>
> b. A universe may be scalable for one population but not for another, or it may be scalable for two populations but with different orderings of objects and categories.
>
> c. Comparisons with respect to degree can be made only if the same scaling obtains in both cases being compared.
>
> (Guttman, 1944, p. 150)

Several years later in the epoch work Measurement and Prediction edited by Samuel A. Stouffer, Louis Guttman and others, Professor Guttman refers to the "relativity of scales" several times. We quote one such passage from this work because it is so germane to the present paper.

> "The above discussion of the relativity of scales according to the population studied applies equally well to the relativity of scales for the same population when two different time periods are studied. A series of items may form a scale at one time for a given population and yet fail to form a scale at another time. Again the suggested explanation is that the change in the population's attitude or opinion with time is one of kind, rather than degree." (Stouffer, et.al., 1950)

These observations by Guttman call attention to two very difficult problems encountered by the researcher who is interested in measuring the change occurring in a universe of content over time. One of the problems has to do ultimately with the structure of that content. The fact that the sample of a universe of objects may arrange itself into what may be called a Guttman scale at one time, but fail to do so at another time points to the structural problem. In such cases a scale comparison over time simply cannot be made because the two structures are different in kind. Perhaps the innovative researcher will be able to apply some kind of typological analysis or pattern analysis to this case, but he won't use a scale comparison since there exists no common metric.

Parts b. and c. in the initial Guttman citation point to the second problem often found in utilizing Guttman scales in longitudinal studies. This is the problem of degree of change over time. Obviously if one finds that a sample from the universe of content scales in one order at time one and in a different order at time two, any attempt to measure the degree of change for the two periods would be spurious. Again, there is no common metric, even though the same objects (items) may be present in the two scales. The two rank orders, even for the same scale scores, will likely be different. Again the innovative researcher may make the most of his comparison by changing his analysis from one of scaling to one of enumeration. That is, County A had 5 services in 1960 and had 6 services in 1970 -- a net gain of one service. Or, he may drop the items from both scales until a common order is achieved. In such a case, the finding that he has, for example, two common five item scales may lead to an erroneous conclusion if he finds that the time one and time two comparison results is no change. The change may be apparent in the items that were dropped.

The Sample

Because of time constraints, as well as the difficulty of getting the data for the 280 counties for the two time periods desired, we have chosen to deal with the problem of getting scales of differentiation at two time periods from a readily existing source. Our sample includes all of the 100 counties in North Carolina in 1964 and 1974. The volumes of County Business Patterns for those years provided the data for the six services that we chose for Guttman scaling purposes.

PROCEDURE

A compilation of six common services was made from the 1964 County Business Patterns and the 1974 County Business Patterns. These are services which were available or not available for both periods for all of the 100 North Carolina counties.* In selecting the six services, it was found necessary to discard many services for various reasons. Some were discarded simply because either all or most of the counties had the service, or, alternatively, the vast majority of the counties did not have the service. In other words, we followed Guttman's advice concerning the selection of items with marginal distributions adhering as nearly as possible to the 80-20 range so as to avoid artificially high reproducibility (Stouffer, et.al., 1950, p. 78). Some items were discarded also because of tied distributions. That is, if 51 counties had service A and 51 counties had service B, we arbitrarily chose either A or B, but not both, for the scale analysis.

Following selection of the six items for the two time periods, scale analyses (SAS) were conducted. Also, further analyses were done to show changes and interrelationships for the scales derived.

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*In thinking about these services with regards to their presence or absence in the results to be presented, the data source must be kept in mind. That is, one will learn that some counties are not indicated as having the service. In some cases, this may be true. However, whether or not a county is listed as having a service in the County Business Patterns is a matter of the number of employees engaged in that service according to the Social Security tax records. If fewer than 50 employees, for example, were reported as having employment in a county in Gas Dealerships, then that county will appear in the County Business Pattern as not having Gas Dealer services.

The services at both time periods, 1964 and 1974, include the following: Amusement, Credit, Drug Store, General Merchandise, Grocery Store, and Gasoline Dealer.

RESULTS

In this section will be presented the results of the scaling procedures for the 1974, 1964 and pooled 1964-1974 data. Also presented are the outcomes of comparing scale results over time as well as the interrelationships of the scales over time.

The 1974 Scale

Data for the 1974 items were subjected to scale analysis. The SAS scale procedure yielded the following distribution for the six items: 37% of the counties had Amusement services; 42% had Credit services; 58% had Drug Store services; 67% had General Merchandise services; 86% had Grocery Store services; and 89% had Gas Dealership services.

The scale results were as follows: Coefficient of Reproducibility - 96.7%; Minimum Marginal Reproducibility - 70.2%; Percent Improvement - 26.5%; and, Coefficient of Scalability - 88.8%.

In this case, the percentages falling outside of the 80-20 range include Gas Dealership services and Grocery Store services. All the other scale criteria were met. It is noted that non-scale types in this scale are minimal. The greatest number of non-scale types amounts to only 5%. This occurs for that scale type 101111 which is assigned to scale type 6.

The 1964 Scale

Data for the 1964 items were subjected to scale analysis. The SAS scale procedure yielded the following distribution for the six items: 17% of the counties had Amusement services; 26% of the counties had Credit services; 38% had Drug Store services; 68% had General Merchandise services; and, 90% had Gas Dealership services.

The scale results were as follows: Coefficient of Reproducibility - 88%; Minimum Marginal Reproducibility - 73.7%; Percent Improvement - 14.3%; and, Coefficient of Scalability - 54.4%.

In this case, the results are less promising than in the case of the 1974 item of the same scale items. First of all, we note a reversal of items order between 1964 and 1974. In 1964 the order is Amusement, Credit, Drug, Grocery, General Merchandise and Gas Dealership. In 1974, this order is Amusement, Credit, Drug, General Merchandise, Grocery and Gas Dealership. In the 1964-1974 period, Grocery Stores services increased from 65% to 86%. However, General Merchandise services decreased from 68% to 67%. Hence, the reversal was brought about by an evident surge of Grocery Store services and a miniscule decline of General Merchandise services.

In 1964, the percentages falling outside the 80-20 range of marginals are Amusement and Gas Dealer. This is not particularly troublesome since both are clearly retail services. However, other criteria of scalability are less than would be desired. The CR is 88% rather than the arbitrary 90%. The CS is 54% rather than the 60% minimum suggested by Menzel (1953). This would perhaps be called by some a quasi-scale rather than a true scale. The greatest single number of a particular non-scale type is for 000101 which is 9%.

The major problem with the 1964 and 1974 scales of these items is their direct lack of comparability due to the different ordering of the items noted above. Try as one may with these two scales, the same rank order comparison cannot be made. If the rank order were the same, a comparison could be made with a common metric, no matter what the C.S. or C.R. But the metric is not the same and a scale comparison is therefore inappropriate.

The Combined 1964 and 1974 Scales

In order to attempt to achieve a common metric, it was decided to pool the data for the 1964 and 1974 periods. The rationale for doing this is suggested by the following words: ". . . if a universe is scalable for an entire population, it will be scalable for all major sub-populations . . . Comparisons with respect to degree can be made only if the same scaling obtains in both cases being compared" (Stouffer, et.al., 1950, pp. 89-90).*

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*It was reasoned that if a scale emerged from the pooled items, that sub-population consisting of the 1964 items and counties could be compared since there would exist a common rank ordering of the items for both sub-populations.

The pooling of items taken at two or more points in time is not a common Guttman scaling procedure. Nevertheless, it is done occasionally for such scaling (Steelman, et.al., p. 4). The pooling of the same components over time for economic index standardization is a common practice, as is the pooling of the same item over time for reliability and validity purposes in psychometric tests (Hagood, 1952; Gulliksen, 1950).

The data for 1964 and 1974 were combined for the purposes of scale analysis. With respect to the combined distribution, it was found that 27% of the counties had Amusement services; 34% had Credit services; 48% had Drug Store services; 68% had General Merchandise services; 76% had Grocery Stores services, and 90% had Gas Dealership services.

The scale results were as follows: Coefficient of Reproducibility - 93%; Minimum Marginal Reproducibility - 70.6%; Percent Improvement - 22.4%; and Coefficient of Scalability - 76.2%.

All of the criteria of a Guttman Scale were satisfied with the exception that one of the services, Gas Dealerships, fell outside of the 80-20 range. Nevertheless, given the other criteria, we suggest that this is an acceptable scale. Gas Dealerships fall within the universe of content called retail services as do the other five items. As can be seen also, there is no excessive number of any particular non-scale type. The pattern 101111 occurs 4% of the time and is assigned to scale type 6.

The 1964 Scale as a Sub-population

Previously the results were reported for the 1964 scale when the scaling was done independently. As a result of pooling the 1964 and 1974 data, a common scale emerged as was also reported. The 1964 sub-population results are as follows: Coefficient of Reproducibility - 89.3%; Minimum Marginal Reproducibility - 73.7%; Percent Improvement - 15.7%; Coefficient of Scalability - 59.5%.

While the CR and CS are slightly below the arbitrarily acceptable criteria for a Guttman scale, it is apparent that there have been improvement in all the scale criteria when the 1964 independent scale and 1964 sub-population scales are compared. The major advantage obviously is that the two, the 1974 and the 1964 scales, can now be directly compared. This was not possible before, as already stated, because of the lack of a common metric.*

Some Scale Characteristics and Comparisons

Table 1 shows the score distribution in percentages mean and median scores for the combined scale, the 1964 scale and the 1974 scale.

Table 1. Scores by Percent and Mean and Median Scores for the Combined, 1964 and 1974 Differentiation Scores

Scale Score	1964 Scale (N=100)	Combined Scale (N=200)	1974 Scale (N=100)
6	7%	18%	29%
5	13	15.5	18
4	21	16	11
3	21	15.5	10
2	17	17.5	18
1	16	10.5	5
0	5	7	9
Total	100%	100%	100%
Mean	3.1	3.5	3.8
Median Score	3.6	3.9	4.7

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*Because the item order for the 1974 scale and the combined scale is identical, it was not necessary to rescale the 1974 scale. In fact the scale criteria for the 1964 sub-population scale can be directly solved by subtracting the 1974 criteria from the combined 1964-1974 criteria.

A comparison of the 1964 and 1974 sub-population scales shows that much differentiation has taken place during the 10 year period. Both the mean and median scores increased, the latter by more than one. It is apparent that the greatest increase over the period took place in scores 5 and 6. The number of counties in score six increased 22% and those in score 5 increased by 5%. A comparison of the scale profiles on the printouts shows this clearly. The increase in the number of counties having a zero score, 4%, is the only indication of counter differentiation or counter development during the period. This, however, may simply reflect the fact that some employees in Gas Dealerships in four counties have moved into other areas. That is, the loss of population in come rural counties may have led to the need for somewhat fewer gas stations and employees. The better technology in this industry may also be a factor.

The 1964 and 1974 scales are highly interrelated. Obviously, they are not independent. Gamma for the 1964-1974 interrelationship is .73. The Spearman Rank Correlation is .71.

Summary and Conclusion

In this paper, Guttman scale analyses were carried out for six common retail services present or absent in 100 North Carolina counties for the years 1964 and 1974. The scaling was done in an attempt to measure differentiation of services in these counties and thereby to infer "development."

The attempts to scale the 1964 and 1974 data independently led to a 1974 scale and a 1964 quasi-scale. Since the order of items in these two scales was different, no valid scale comparisons could be made between the two. The 1964 and 1974 data were merged and these were scaled. The result was successful. The scale distributions for the 1974 and 1964 profiles were treated as sub-scales of this combined scale and valid comparisons were made. It was shown that differentiation, measured by a common metric, occurred between 1964 and 1974. It may be inferred that "development" has taken place in this period.

It is our conclusion that the combination of relevant data from different time periods is a viable approach for the development of common scales in order to assess changes occurring over time on that common dimension which the scale measures. The investigator must be certain in doing this, however, that the items remain valid indicators of the concept to be assessed.

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MANIFEST AND LATENT PARTICIPANT ATTRACTIONS IN THE AMERICAN AGRICULTURAL MOVEMENT*

Gary S. Foster
Kansas State University

Introduction

This paper will focus on the recently organized American Agriculture Movement (AAM) in the context of a social movement. Because of the paucity of literature in the professional sociology and agricultural economics journals, most of the data addressing the AAM have been drawn from news periodicals, newspapers, and various agricultural and farm journals. Even given the probable accessibility of more diverse and primary data sources, there are certain advantages inherent in the sources of data utilized in this paper. First, given the focus of this paper, such data seem sufficient for an initial investigation of the AAM. Second, in the absence of journal articles and other literature, the more 'popular' data sources must be dealt with in order to have more specific direction for further investigation, i.e., to establish a point of departure. Third, the data under consideration are the data largely available to the public at large, and as such, could later facilitate research into public perception of the AAM. That is, it is assumed that the general public's conception and understanding of the AAM come from the same (sort of) data sources employed here. Such data sources, by reporting the espoused goals of the AAM, present the public with a seeming paradox: why does an apparently economically well-off group form what purports to be an economic protest group? This paper will focus upon the manifest and latent attractions for participation in the AAM, largely expressed through the ideology of the movement. The seeming paradox then diminishes with consideration of latent attractions.

The AAM as a Social Movement

Taylor (1953: 1; see also Taylor, 1949: 511, 518), in the context of farm and agricultural movements, states that "a movement is a type of collective behavior by means of which some large segment of society attempts to accomplish adjustments of conditions in its economy or culture which it thinks are in maladjustment." The problem of "maladjustment" that AAM participants have perceived is economic deprivation. The AAM, as well as its ideology, may be viewed as a direct response to a created agricultural depression. Most agricultural authorities contend that the present low price level is the result of a bust end of a production cycle that developed in 1973-74. In 1972-73, a three percent decrease in the world's grain production resulted in a 250 percent price increase and demand in world grains (Goldberg, 1975: 81-3). In response, USDA's Secretary, Earl Butz, urged farmers to "plant fencerow to fencerow" to meet the world's food demand. Doubled wheat prices and increased corn and soybean prices encouraged farmers to expand their operations and equipment (via loans, using their land as collateral). As world demand declined with improved overseas yields, the farmers were faced with debts and falling prices. To meet debt payments, they continued to produce "fencerow to fencerow," driving prices down even further. Increased land value also brought about higher taxation of expanded operations (Barish, 1978: 1, 9).

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Killian's (1964: 448-52) power-oriented/participation-oriented movement classification is particularly relevant in addressing the manifest and latent attractions for participation. The AAM, as espoused by its ideology, is primarily a power-oriented movement, with coordinated group actions thought to be the necessary means for obtaining the desired change. However, a closer examination of AAM's ideology suggests that it, at least latently, approaches a participation-oriented movement in which group actions are viewed as the source of benefits or gratifications for the individual participants.

Manifest Attractions for AAM Participation

Since manifest attractions are intended, it would be expected that such attractions are clearly stated in the movement's ideology. The ideology provides the movement with objectives, justification, weapons of attack and defense, and inspiration and hope. Further, the popular character of the ideology, as opposed to its abstract and ambiguous character, assumes emotional symbols, stereotypes, and folk arguments, and without the popular appeal, the ideology would be of little value to the movement (Blumer, 1969: 19-20; Ferlach and Hines, 1970: 159-82; Smelser, 1962: 8-22).

With respect to objectives, the AAM has specified a five-point goal (i.e., the manifest attractions) which involves the following: 1) one hundred percent parity for all domestically consumed and exported agricultural products; 2) one hundred percent parity for all products held in reserve; 3) creation of a coalition of agricultural producers to participate in governmental formulation of farm bills; 4) cease all food imports which are also domestically produced until one hundred percent parity is obtained; and, 5) all announcements pertaining to any agricultural production cycle shall be made well in advance, allowing producers adequate time to make needed adjustments in operations. The five points are often condensed into the shibboleth, "parity." Another demand posed by the AAM is the election, rather than appointment, of Agricultural Stabilization and Conservation Service county administrators ("Farm Strikers Talk to Agriculture Secretary," 1978: A8).

Thus, AAM's main objective is to bring farmers together to plan courses of action in order to eliminate or favorably alter their position relative to their perceived economic deprivation. Participation in the AAM would then be particularly attractive to those who have perceived a relative, economic deprivation. Yet, a possible tactical error by the AAM has potentially led some non-participants to express the general paradox, "this is the richest-looking group of broke people I've ever seen" (Nicholson, et al., 1977: 57). In using 35,000 dollar tractors as protesting billboards and planning six million dollar tractorcades (Powers, 1978: A1, A6, L. Smith, 1978: 94), the AAM has not emphasized that the economy now demands such equipment for 'successful' farming (if, indeed, it does), potentially make it difficult for the general public to acknowledge legitimacy for the perceived economic deprivation. There is then presented to the public a paradox between the apparent economic status of AAM participants and their perceived economic deprivation.

However, Morrison and Steeves (1967: 422-4; see also, Morrison, 1971: 675, 681) note that those experiencing the greatest economic deprivation, the marginal farmers, are normally not participants in social movements. Thus, it is suspected that the participants are those who were 'successful' prior to the 1973-74 expansion, and, in expanding, now perceive economic deprivation and loss. Supporting this contention to some extent are the status positions of the founders of AAM, including a veterinarian, a physicist, and the vice chairman of the Colorado Highway Commission (Cook, 1977: 53). Economic deprivation is then acknowledged as the manifest impetus for, and attraction to, the AAM.

However, much of the social movement literature addresses only the primary or manifest factor, reducing movements to some mono-causal response. Barish (1978: 1) seems to sense the fallacy of a mono-causal factor, saying, "on the surface the protest is in response to low farm prices, but the plight of farmers is a complex issue which has vexed policy makers and politicians for almost a century." Thus, it would seem heuristically advantageous to propose potential, latent attractions.

Latent Attractions for AAM Participation

The ideology of a movement, either explicitly or implicitly, should indicate attractions other than the manifest one(s) for participants and potential participants. That is, even non-goal activities are part of the psychology of the movement and therefore must be considered part of the ideology, explaining even further the extent of the ideology's popular appeal. Olson (1965: 51, 60-4, 113-4, 153-9), in noting the increased costs incurred by individuals in a group endeavor, contends that the group must employ separate and selective incentives which are benefits beyond the main objectives the group is seeking.

Beyond economic deprivation, Glock and Stark (1965: 246-57; also, Glock, 1964: 24-36) identify four other types of deprivation. The desires to overcome such deprivations might then be grounded in the popular appeal of AAM participation. Glock and Stark's (1965: 247) social deprivation, " . . . based on society's propensity to value some attributes of individuals and groups more highly than others and to distribute such societal rewards as prestige, power, status, and opportunities for social participation accordingly," might constitute a latent level of attraction. This is analogous to Zald and Ash's (1966: 329) secondary role of solidary incentives (e.g., prestige, respect, friendship).

Historically, the farmer has not been accorded the prestige that the occupation received when more people were engaged in farming. Taylor (1949: 511), in recognizing the significance of social status, states that the farm movement

> . . . has never been thought of as a significant historic movement growing out of deep and persistent maladjustments between the . . . social status of rural people on the one hand, and . . . social status of people in other fields of endeavor.

Factors such as the consolidation of rural schools, the loss of rural community identity, the yearly conversion of five million acres of farm land to urban or industrial use ("Plowshares into Swords," 1978: 28), and the perception of economic deprivation probably have had some impact on the farmer's self-perception and on others' perceptions of him. Participation in the AAM potentially facilitates the farmer's sense of support, status, prestige, and even recreation (see Blumer, 1969: 16).

Certainly, the political influence of the once-powerful farming public has declined with their numbers, urban congress members outnumbering rural congress members 400 to thirty-five in the U.S. House of Representatives. In terms of voting power, the farming public comprises less than four percent of the population, declining from twenty-five percent in 1930. Demanding the elections of ASCS county administrators and endorsing political candidates is then viewed as an attempt by AAM to recoup rural, political influence.

Facilitating family involvement are the women's auxiliary, American Agri-Women, AAM rallys, picnics, and celebrations at the local level. Such events serve as stages for interacting and elevating esprit de corps. Responses to social deprivation may then compensate for a perceived lack of status by providing alternative status systems (Glock and Stark, 1965: 251).

Ethical deprivation, i.e., perceiving discrepancies between ideals or espoused values and realities, may also constitute a latent attraction for participation in the AAM. "Indeed, the . . . right wing activity in American politics seems to stem to a great extent from the perceptions of . . . rural Americans that their traditional values are no longer predominant in . . . society" (Glock and Stark, 1965: 253). Certainly, such ethical deprivation could contribute to the perception of status deprivation.

Occupationally, farming is accorded much value, at least superficially. The American farmer is pedestaled as the leading agricultural production power in the world. Yet, the 160 acre farmer is told that he can no longer make it ("Why Farmers Are Up in Arms," 1978: 25). Thus, a perception of economic and social deprivations would almost necessitate a perception of discrepancy between values and reality; economic and social securities may then function as manifestations and indicators of the reality of particular values.

Tactics employed by the AAM may be instrumental in overcoming various types of perceived deprivation. Zald and McCarthy (1972: 670) note the increased status and legitimacy extended to movements by television coverage. Hunters and fishermen have found land access often barred with "AAM: No Hunting, Fishing, or Trespassing" signs, transforming AAM's status to a private sports club. One of the more publicized tactics has been the tractorcades. It seems that this particular activity, at least at the county and state levels, potentially becomes the nucleus for family involvement (J. Smith, 1978: 14-6; Nicholson et al., 1977: 57). Much of the tractorcade involvement constitutes ceremonial behavior with the ritualistic paraphernalia, such as the slogans attached to tractors, songs, cheers, fostering feelings of common identity. Blumer (1969: 16) notes that

> . . . the value is one that comes from large assemblages, in the form of the sense of vast support that is experienced by the participant. The psychology that is involved here is the psychology of being on parade. The individual participant experiences the feeling of considerable personal expansion and therefore has the sense of being somebody distinctly important.

The tactics employed by the AAM have drawn nationwide recognition for the American farmer. While this may not bring about a decline in the perceived economic deprivation, the "limelight" may potentially disperse the darkness of other types of deprivation. Further, the relative failure of specific tactics, such as withholding and striking (i.e., not planting), would indicate that many members are willing to participate socially and philosophically, but not absolutely. A consideration of latent attractions would then suggest that the AAM is more than an economic protest group, and that the paradox exists only when the manifest attraction is considered.

Conclusions

The future of this latest link in the chain of farmers' movements is uncertain. Indeed, AAM's perception of economic deprivation is given little credence by the federal government. President Carter contends the farmers are no longer on the verge of bankruptcy ("Farmers Not Impressed with Carter's Image," 1978: A1), and USDA claims farm prices are again rising ("Behind the Unrest on America's Farms," 1977: 70). With the 1977 farm bill raising subsidies from 345 million dollars to seven billion dollars (L. Smith, 1978: 94), and agricultural economists contending that one hundred percent parity would cost as much as forty billion dollars (Barish, 1978: 9), the government's apparent attitude is that it has done all it can.

To this extent, the government constitutes an out-group within an in-group/out-group relationship, thus providing solidarity and *esprit de corps* to AAM (Blumer, 1969: 15-6). However, if AAM's goals are indeed unobtainable, it would seem that to survive, AAM will have to change its goals, perhaps embracing more immediate and individual attractions. For example, since the initial draft of this paper, AAM has been discussing ninety percent of parity as an acceptable goal. Further, while AAM has been able to mobilize a wide variety of farmers, "farmers differ so much in nature of their enterprises and the problems they face that it is hazardous to treat them as an undifferentiated population . . ." (Morrison and Warner, 1971: 15). Thus, AAM's position with respect to its following is precarious, and a shift toward more specific goals may be to the disinterest of many members, or even create an opposition group of farmers. Potentially then, this latest link is a weak one.

This paper is exploratory, speculative, and preliminary rather than definitive. However, it is suggestive of research focusing on propositions of latent attractions, and the data suggest such inquiry as a viable area for future empirical research. Specific areas potentially fruitful for hypotheses generation and testing include public perception of any paradox as well as participant perception of this paradox (perhaps within the framework of conflict or cognitive dissonance/consonance). The empirical assessment of manifest and latent attractions would seem quite valuable, particularly their relationships to goal modifications. Are manifest goals simply altered or are latent goals elevated to manifest statuses and what are the impacts of each type of change upon the future and direction of AAM? These are areas that must be given consideration in future research on any social movement.

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FARM TRENDS IN MISSISSIPPI AND THE NATION
1969-1974 AND 1950-1974

Ellen S. Bryant[1]
and
Mehdi Sadeh[1]

This report, which has been extracted from a more comprehensive study, compares farm trends in Mississippi and the United States as reported in the agricultural censuses of 1974, 1969 and 1950. Statistics for all farms and for commercial farms are presented. Explanation of 1969-1974 trends in numbers farming in Mississippi for both classifications is attempted via regression analyses of the state's 82 counties.

In spite of substantial, and even staggering, losses of farmers in the state, Mississippi continues to have larger proportions of small or low-income farms than other areas of the country. While Mississippi farms designated as commercial seem to be integrated into national farming patterns, about half of the state's farms enumerated in 1974 fell into the farm income class of $1000 to $2500. These units, it seems, can be regarded largely as residences--serving either the retired person or the industrially employed who enjoys living on the land.

Statistical descriptions were made of trends in commercial farms for 1969-1974 and all farms for 1950-1974. For the former comparisons, criteria defining farm units were constant in the two periods. Unfortunately for the all farm group, the unit definition was chenged twice during the 1950 to 1974 period. The last change was in 1974 when the minimum acreage requirement was deleted and the minimum sales requirement raised to $1000 or more. It is under the assumption that the definitions of all farms in the agricultural censuses are essentially valid that an examination of their trends was carried out. To the extent that the farm definitions realistically describe what was a farm at the time of taking a particular census, the changes depicted for them are accurate representations of trends.

Long Range Trends Among All Farm Operators--Numbers, Size and Tenure

At mid-decade, the number of farmers enumerated in the state totaled 53,620, of which only 15 percent were nonwhite. Losses since 1969 had cut back the total group by 26.1 percent, whites by 24.7 percent, and nonwhites[2] by 52.4 percent. Between 1950 and 1974 the state lost four out of five farmers, two out of three white farmers and more than nine out of ten nonwhite farmers. In 1950 the state had a total of 251,887 farms and farmers and nearly half were black. The loss trends parallel the nation's, but they are nonethless steeper and indicate that the state is moving closer to national averages in proportion of its population engaged in farming and in the proportion which is white. Nationally, the loss rate for all farms was 15.2 percent in the latest pentad and 57.1 percent since 1950. Loss rates for whites and nonwhites are also somewhat lower, but surprisingly, differences between rates for the two races are larger on the national level, see Table 1. In 1974, all farmers constituted about 1.1 percent of the nation's population and 2.3 percent of the state's. Nationally, 0.2 percent of nonwhites were farmers while at the state level, 1 percent were. Inasmuch as the all-farmers group has a higher percent of non-commercial farmers than the nation, the portent is that as the state comes to more closely approximate the national pattern, it will experience further losses in the number of these less productive farms.

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[1] Department of Sociology, Mississippi State University.

[2] The agricultural censuses tabulation data for blacks in 1969 and for nonwhites in 1974. Differences in the state of minimal--there were 33 farmers of "other races" in 1969.

The increase in average size of farm was nearly as dramatic as the loss in the number of farmers during the twenty-five years. The average for all farms in Mississippi was 267 acres in 1974, was approaching 300 acres for white farmers, and had just topped 100 for nonwhites. Thus, the typical Mississippi farmer, whether black or white, no longer plowed "40 acres" with a "mule", although, in 1950, blacks could have fitted that description. At that date the average farm operated by a black was 37 acres. For a white it was 126 acres. Overall it was 82 acres. Average sizes for both races are close to three times what they were in 1950 and substantial gains were recorded even in the lates five-year census.

Movement out of agriculture during the quarter century between 1950 and 1974 also consisted of disproportionately large numbers of farm tenants, and espcially of nonwhite farm tenants. The percent tenancy on Mississippi farms has decreased from 51.1 to 7.1 overall, from 27.8 to 6.9 for whites, and from 76.5 to 8.4 for nonwhites. While the state's percents for tenancy are now very similar for the two races, in absolute numbers white tenant farmers outnumber nonwhites by 4.6 to one; in 1950 there were nearly 3 blacks for one white tenant farmer. Nationally tenancy declined from 26.5 percent to 11.3 percent overall. Thus, the positions of state and nation, in terms of percent of farm operators classed as tenants, have been reversed. In summary, (1) Mississippi has lost 78% of all farmers since 1950 and this loss has been disproportionately made up of blacks with the result that the percent of all farmers who were black dropped from nearly 50% in 1950 to 15% in 1974. (2) Highest losses occurred among tenants and their proportions declined from 51% to 7%. Again, the greatest losses were of black tenants and from making up nearly 75% of tenants in 1950 their proportions in 1974 had been reduced to 18%. (3) Full owners made up the largest proportion in the tenure distribution in 1974--72% for whites and 78% for nonwhites increasing from 62% and 19% respectively minimal for whites, it is a drastic one for blacks. The full ownership proportions were larger in the all farmer class than for any other group examined--more than for commercial units in the state and nation, suggesting again that this type of operation may function more as a homestead than as a farm. And (4) decrease in the number of farming may to some extent be counteracted by increased farm size.

Commercial Farms

Statistics on 1969 to 1974 trends for commercial farms indicate a continuation of the state's earlier movement away from the traditional self-sufficient family farm unit and toward mechanized commercial operations, which are typical of other parts of the nation, but the similarities between the state and nation were not uniformly increasing. See Tables 1 and 2. The state's 3.9 percent loss of commerical farms, 1969-1974, was only slightly larger than the nation's 2.2 percent loss. For white commercial farmers, loss rates were even lower--0.8 percent for the state and 1.9 percent for the nation. For nonwhites (or blacks)[3] however, loss rates of commercial farmers were relatively high--29 percent in the state and 16.2 percent nationally. The percent of the state's commerical farms run by nonwhites dropped from a low 10.6 percent (blacks) in 1969 to a lower 7.9 percent in 1974, bringing the statecloser to the nation's 1.8 percent of commercial farmers classed as nonwhite.

Increase in average acreage has also been small. The average Mississippi unit was 443 acres in 1974, having increased from 436 acres in 1969 but still lagging about 20 percent behind the national average. Nonwhite farmers in the commercial classes have smaller farms on the average than whites; however, the differences between state and nation is less for nonwhites than for whites--a 45 acre difference for the former and 75 for the latter.

Tenure characteristics changed very little between 1969 and 1974 for commercial farms. Compared to all farms, the percent with full ownership is less; compared to the nation, the state's percent is slightly larger and increased between 1969 and 1974 for both whites and nonwhites. Part ownership, on the other hand, has higher proportions than it has for all farmers, is lower for the state than the nation and decreased during the period studied. Tenancy is also slightly higher than for all farmers, is higher nationally than on the state level, and decreased slightly in the state between 1969 and 1974. The differences cited indicate that the state is moving slightly away from the national pattern, but they also suggest that full-owner, less- productive units (all farms) probably serve more as home sites than as farms and that combining owning and renting land is part of the dynamic nature of the productive farming.

It might be expected that the decrease in numbers of farm operators and accompanying changes in the distribution of tenure status, as well as growth in the number of large scale coporation-owned farms, would be associated with changes in the amount of use made of hired and contract labor. Many displaced former tenants may find it necessary to enter the farm labor classes. Contract labor has about the same extent of use both inside and outside of Mississippi, but the percent of farms using hired hands inside the state is half again as large as it is nationally. Both decreased in the extent of use in both geographic entities during the pentad. However, the percent of farms reported as coporation owned (both national and state level) while increasing, is so low as to appear negligible, is unable to account for much of the use of these types of labor.

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[3] See footnote 2.

The Mississippi farmer's dependence on off-farm occupations and income suggest a lower level of affluence than in the nation as a whole. Commercial farmers in the state have a higher proportion with more off-farm than farm income (and with principal occupation than farming) than the nation does (26.8 percent to 19.9 percent and 32.6 percent to 25.2 percent). For non-commercial farmers, however, the state-national differential is reversed. In this case, smaller proportions in the state have principal occupations and major income from non-farm sources. The one exception is in the occupations of those aged 65 and over. For these, state and national percents are virtually the same. Thus, it seems that commercial operators in the state are more dependent on off-farm sources of support, and the non-commercial operators have less access to it. In corroboration with these statistics are the higher proportions in the state, compared to the nation, of commercial farmers reporting that they work off, or reside off of the farms they operate. These percents increased between 1969 and 1974.

The average age of all Mississippi farmers has been getting progressivley older since 1950, and the 1969-1974 trend for operators of commercial farms in the state was consistent with this trend. Age eased up a few tenths of a year for white farmers during the pentad and advanced about two years for nonwhites. The median ages, which were computed from aggregated data in the Agricultural Census tables cited, provide the starting fact that the average black operator of a commercial farm in Mississippi was nearly 60 years old in 1974-- two years older than he was in 1969. While nationally the average black farmer is three years younger, his rate of aging has been even sharper. By contrast, the average Mississippi white farmer aged only .4 of a year during the period and was less than a year older than his counterpart who added .8 of a year. See Table 3.

These increasing median ages of farmers, however, disguishing other adjustments in the age distributions of farmers. While the percents aged 65 and over increased most rapidly and the percents between ages 35 and 64 decreased, the proportions of those under age 35 increased. In fact, for Mississippi whites, the increases were absolute as well as proportional and for Mississippi nonwhites, and national whites and nonwhites, they were absolute at age 25 and under.

To summarize, it can be said (1) Decreases in Mississippi were slight (3.9%) and not impressively larger than the national loss rate. (2) Commercial farmers include larger proportions of tenants and part owners and smaller proportions of full owners than the all farmer group. Mississippi, however, had a somewhat higher percent of full ownership than the national average. (3) Median ages for commercial farmers increased between 1969 and 1974 with that for nonwhites reaching close to 60 years. In spite of older averages, however, there was a movement toward redistribution of farmers into younger ages. (4) Average size of commerical farms in the state is increasing slowly but is still below the national average. For states east of the Mississippi River, however, average size ranks second only to Florida and the state contains one of the few areas with averaged acreages in excess of 500 acres.

Explaining Change in Numbers Farming, 1969-1974

Explanation of change in the number of farmers in Mississippi's 82 counties, 1969-1974, was attempted via regression analysis using an available data set consisting of the variables listed in the appendix. Equations were developed through use of a computer package program which independently selects sets of best variables of progressively larger sizes from a relatively large set of variables entered into analysis. Selection of best equations was made on the basis of R^2, MSE and C_p statistics. Equations were constructed for three populations of farmers: commercial farmers (white and nonwhite); all farmers (white); and all farmers (nonwhite).

Commercial Farmers

Twenty variables were entered into a regression program. These produced an R^2 of .582. However, an equation of 11 variables gave an R^2 of .568 and one of 7 gave an R^2 of .525. Because the other statistics indicated the last had the highest level of statistical probability, it was selected as offering the best model of explained variation. The order of permanent entry into the regression equation, and thus the relative ordering of importance, is indicated by the sequence in which they are listed in Table 4.

The first 4 contribute most of the explained variation. They have the largest standardized beta values. The direction of association between the dependent variable (change in the number of commerical farms) and (1) increasing proportions of retirement farms, and (2) high proportions of commuters is direct while that between (3) increasing farm size and (4) the percent of the black labor force in agriculture is inverse--indicating that the first two variables would tend to slow movement out of agriculture and the last two would tend to increase it. For the other three variables, the association was inverse for employment and direct for changes in corporate ownership of farms and classification as Type II counties on a commuter typology. Type II's were counties which increased their labor force and proportion of workers commuting, 1960-1970.

All Farmers--Nonwhite

For all nonwhite farmers, 15 independent variables were entered into analysis. With all 15 an R^2 of .8042 was obtained. But it was possible to do nearly as well with only three variables which produced an R^2 of .7902. This set of varibles is listed in Equation 2 in Table 4. Change in acreage in farms gives most of the explanation and its association with the dependent variable is direct. The number of nonwhite farms decreased as acreage was removed from agriculture. The betas for the other two variables are also positive. Type I counties are those which had labor force growth but decreasing proportions of workers who commuted, 1960-1970. The zero order correlation coefficient for number of farms with hired farm labor was negative (-.049) but reversed during analysis.

To determine the extent to which variation could be explained without use of the acreage variable, a regression run was made using the other 14 variables. These yielded an R^2 of only .337 and the best

7 among them produced nearly as good an explanation with an R^2 of .303. The variables coming in to substitute in part for the explanation from the acreage variable were (1) change in the number of nonwhite tenants, (2) percent of the nonwhite labor force in manufacturing in 1970, (3) change in the number of farms using contract labor, (4) change in the number corporation owned, (5) change in the number classed as retirement farms, and (6) commuter Type I. One and six had direct associations but all of the others had negative betas. Thus loss in the nonwhite all farmer group seems to be associated with increased use of contract labor, increases in corporate ownership, increased numbers of retirement farms, and high proportions of the labor force in manufacturing.

All Farmers--White

The regression equation for change in the number of all white farmers was also developed from 15 independent variables. All 15 yielded an R^2 of .623, but the best 7 were nearly as good with an R^2 of .600. These seven are listed in order of importance in Equation 3, Table 4. Most of the explained variation is provided by the first three variables. The last four together add about 6.5 percentage points to R^2. The first three (use of contract labor, acreage in farms, and tenancy) as well as the commuter ratio and farms classed as retirement were directly associated with changes in farm numbers. Only two (percent of the white labor force in agriculture and manufacturing in 1970) had negative signs and were thus associated with loss of farmers. Thus retention of acreage in farming, high proportions of the labor force commuting, use of contract labor and increase in farm tenancy would tend to slow losses of white farmers.

An equation omitting the acreage variable was also run for this data set even though change in farm acreage was much less important in white farmer loss than in nonwhite farmer loss. Omission of this variable did not yield dramatic differences. All 14 gave an R^2 of .549, and the best 8 produced an R^2 of .534. This new 8 variable equation used all of the original ones except "present labor force in agriculture", and substituted instead change in car tag registrations, change in the number of jobs under covered employment and commuter Type II. Increases in number of jobs under covered employment was associated directly with changes in numbers of farms, but the transportation and commuter Type II (growth of both labor force and proportion commuting) were associated with loss of white farmers.

Summary and Conclusion

The farms and farmers of Mississippi are moving closer to national norms on their percent of the population, farm size, value, tenure, racial composition and other characteristics, but differences still remain. Perhaps the most significant is the larger proportion of its farms falling into the low production, non-commercial farm class--52 percent as compared to 28 percent for the nation. This difference portends further sizeable losses of farmers in the state, if it is assumed that the state will continue to become more like the nation in its economic structure.

A second overall difference, judging from the extent to which

Mississippi farmers depend on off-farm occupations and income, is an apparently lower level of affluence among them than among the nation's farmers. Commercial farmers in Mississippi are more dependent on off-farm sources of income and non-commercial units are less dependent on them.

On the other hand, the state's 2.3 percent of population classified as farmers is not impressively larger than the nation's 1.1 percent. Furthermore, its racial composition appears to be fast approaching national levels. Not only has the small black tenant farmers become a virtual anachronism, the black commercial farmer also seems to be fading from the scene.

Regression analyses helped interpret some of the observed trends and indicated that different factors were probably operating among different types of farmers in the adaptations they were making to a changing agricultural situation. Major factors contributing explanation to the county differences in percent change in number of farms or farmers, 1969-1974, can be summarized as follows: (1) Having a high proportion of its labor force in either agriculture or manufacturing may be related to decreases in the numbers farming. (2) Changes in retirement farming are directly associated with changes in numbers farming for commercial and white farmers. For the nonwhite all farmer class, the reverse is true. (3) Commuting seems to be positively associated to retention of farmers--of all white farmers and (seemingly) nonwhite commercial farmers. (4) The "labor force--commuter" county typology was also important although as a set of dummy variables, their effect is to either raise or lower the value of the intercept and the nature of their association is somewhat difficult to interpret. (5) Farm acreage was measured in two ways. In the commercial farmer equation, it was entered as percent change in the average size of farm. For the all farmer equation it was measured in terms of change in the number of acres in agriculture. For the first the association was inverse, while in the last two it was direct. This factor seems to be extremely important in the loss of marginal black farmers. It also seems to affect the direction of association of the county typology. (6) Several other economic variables made minor contributions to explained variations. In general, when they were indicators of agricultural activity, they were associated with retention of farmers and when they were indicators of non-agricultural activities, they were associated with loss. In the second equations completed for all farmers (where change in acreage was not controlled) the results were not entirely consistent with this generalization. However, inasmuch as the three populations of farmers analyzed seem to largely represent different positions in the agricultural enterprise, the inconsistencies are not surprising.

Two factors are probably important in determining the direction of association of a variable--the degree to which the farm makes a valuable economic contribution to its operators and the availability of alternative or supplementary sources of jobs and income. For commercial farmers, incorporation, use of the farm as a retirement residence, and commuting to a nearby job seem to be pull factors which hold farmers on the farm. If available jobs are sufficiently attractive, however, people may leave farming. The all farmer white group, of which 52 percent are non-commercial, is fairly similar to the commercial group. Additional pull factors--keeping land in agriculture and tenancy status--seem to be operating. The extent to which land moves out of or stays in agriculture seems to embody the effects of other economic variables. When its effects were removed from this equation, then increases in the number of in-county with increased automobile registrations and increased commuting seems to stimulate loss of farmers.

The exodus of nonwhite farmers seems to be accompanied by the removal of their land from agriculture. The only factors which seem very important in holding nonwhites on the land are tenancy, use of hired farm labor, and location in a county where the labor force was growing but the proportion commuting was decreasing. Contract labor, corporate ownership, retirement farming, and manufacturing employment seem to push the nonwhite out of agriculture. The implications is that the margin of resources on which their farm operations are based is very slim and unless localized support from hiring out to other nearby farmers or a job in town are available, the likelihood is that the black farmer will get out of the farm enterprise. Over two thirds of the all farmers--nonwhite group are classed as non-commercial, that is with sales ranging between $1000 and $2500.

The data in this report support the contention that Mississippi's farm population is modernizing but yet maintains a degree of difference from national averages. Commercial farming is in line with national patterns, demonstrating flexibility and adaptation to changing situations. Further, if trends continue to bring the non-commercial farm group into accord with the national pattern, the next census may show sizeable further reductions in this sector of the state's population of farmers. On the other hand, if the pattern of coupling farm residence with industrial jobs can be maintained, Mississippians may maintain a unique aspect of their rural culture.

TABLE 1. - FARMS OR FARMERS BY NUMBER, SIZE, AND TENURE, UNITED STATES AND MISSISSIPPI, 1974 AND 1969

1974 Characteristics of Farms or Farmers	Total	White	Nonwhite
Commerical Farms[a] or Farmers			
United States:			
Number	1,695,047	1,664,431	30,616
Percent Change 1969-1974	-2.2	-1.9	-16.2
Average Size (Acres)	534	539	229
Percent Classed as:			
Full Owners	53.4	53.4	53.0
Part Owners	33.4	33.4	28.9
Tenants	13.2	13.2	18.2
Mississippi:			
Number			
1974	26,056	23,991	2,065
1969	27,100	24,191	2,876[b]
Percent Change 1969-1974	-3.9	-0.8	-29.0
Average Size (Acres)	443	464	184
Percent Classed as:			
Full Owners			
1974	58.7	59.0	60.6
1969	56.0	56.3	54.2[b]
Part Owners			
1974	32.1	32.5	26.7
1969	33.9	34.5	29.2[b]
Tenants			
1974	9.2	8.5	12.7
1969	10.0	9.3	16.5[b]
All Farms or Farmers			
United States:			
Number	2,314,013	2,254,642	59,341
Percent Change:			
1964-1974	-15.2	-14.2	-42.8
1950-1974	-57.1	-53.1	-89.1
Average Size (Acres)	440	447	192
Mississippi:			
Number	53,620	45,447	8,173
Percent Change:			
1969-1974	-26.1	-24.7	-52.4
1950-1974	-78.6	-64.6	-93.4
Average Size (Acres)	267	297	101

[a] With sales of $2,500 or over

[b] Negro operators.

Sources: Copied and computed from U. S. Bureau of the Census, Census of Agriculture, 1974 Statistics by Subject, Vol. II, Part 3, Ch. 1 (Washington, D.C.: USGPO) Tables 12, 25, 31, 41 and 59; Vol. II, Part 3, Ch. 3, Tables 3 and 4; Vol. II, Part 2, Ch. 1, Tables 9 and 21; Mississippi, Vol. I, Part 24, Tables 3 and 14; 1969, Vol. I, Part 33, Section 1, Table 25.

TABLE 2 - SUMMARY CHARACTERISTICS OF FARMS AND FARM OPERATORS, MISSISSIPPI AND UNITED STATES, 1974 AND 1969

Characteristics	Mississippi		United States	
	1974	1969	1974	1969
Commercial [a] farms and farmers:				
Number	26,056	27,100	1,695,047	1,733,683
Average size, acres	443	436	534	530
Value per acre, dollars	378	240	341	195
Percent of total farm income from				
Crops	59.1	45.3	51.5	17.0
Forest products	1.2	1.2	0.3	.3
Animals and their products	39.7	53.5	48.2	62.7
Percent with income from				
Custom work & agricultural services	8.8	12.0	11.0	15.0
Recreational services	0.5	1.2	1.0	1.2
Government farm programs	12.5	54.4	10.5	48.6
Percent with				
Automobiles	67.5	67.7	78.0	81.5
Trucks	82.8	83.4	82.2	82.2
Tractors	84.4	87.4	85.7	89.0
Corporate ownership	2.0	1.5	1.7	1.2
Hired farm labor[b]	18.1	23.3	13.2	14.2
Contract labor	5.9	8.6	5.9	8.0
Percent reporting				
Working off farm operated	31.6	30.9	27.5	43.3
Residing off farm operated	18.1	17.8	16.0	14.2
All farms and farmers:				
Number	53,620	72,577	2,314,013	2,730,250
Average size, acres	267	221	440	390
Value per acres, dollars	379	234	336	194
Percent of off-farm income greater than farm products sold:				
Commercial[a]	26.8	NA	19.9	NA
Non-commercial	67.8	NA	74.1	NA
Percent with principal occupation other than farming:				
Commercial[a]	32.6	NA	25.2	NA
Non-commercial	64.8	NA	68.9	NA
Under age 65	75.2	NA	78.2	NA
Age 65 and over	38.3	NA	38.1	NA
Percent commercial[a]	48.6	37.3	73.3	63.5

a. Farm with sales of $2,500 or more
b. 150 days or more

Sources: Copied and computed from U.S. Bureau of the Census, 1974 Census Agriculture, Mississippi, Vol. I, Part 24 (Washington, D.C.: USGPO) Tables 1, 6, 9, 10, 14, 15, 18. 1974, Statistics by Subject, Vol. II, Part 3, Chapter 1. Tables 31 and 41; Vol. II. Part 3, Chapter 2. Table 10, Vol. II, Part 7, Tables 5 & 49; 1969, Vol. II. Chapter 3. Table 36.

TABLE 3. - TRENDS IN AGE DISTRIBUTIONS OF COMMERCIAL FARMERS[a], MISSISSIPPI AND THE UNITED STATES BY RACE, 1969-1974

Age and Race	Mississippi		United States	
	1974	1969	1974	1969
All Ages				
Total				
Number	25,496	27,100	1,662,542	1,733,683
Percent	100.0	100.0	100.0	100.0
White				
Number	23,431	24,191	1,631,926	1,697,153
Percent	100.0	100.0	100.0	100.0
Nonwhite				
Number	2,065	2,876[b]	30,616	36,530
Percent	100.0	100.0	100.0	100.0
Percent by Age:				
Under 25				
Total	1.8	1.2	2.4	1.9
White	1.8	1.3	2.5	1.9
Nonwhite	2.4	0.5	1.4	0.9
25-34				
Total	9.8	8.4	10.6	10.4
White	10.3	8.8	10.6	10.5
Nonwhite	9.3	4.3	6.3	5.6
35-44				
Total	17.2	17.7	17.5	20.2
White	17.6	18.4	17.6	20.2
Nonwhite	13.0	11.4	13.1	16.7
45-54				
Total	24.5	27.7	26.1	28.2
White	25.0	28.0	26.0	28.1
Nonwhite	17.9	26.2	26.1	31.2
55-64				
Total	27.5	30.2	26.6	26.4
White	27.3	29.6	26.6	26.3
Nonwhite	29.7	35.0	29.9	30.0
65 +				
Total	19.2	14.8	16.8	13.0
White	18.0	13.9	17.7	12.9
Nonwhite	32.7	22.7	23.2	15.5
Median Age				
Total	53.6	53.2	52.5	51.2
White	53.1	52.7	52.4	51.2
Nonwhite	59.2	57.2	56.0	53.6

a. On farms selling $2,500 or more in produce with individual or partnership organization.

b. Negro.

Sources: Copied and computed from U.S. Bureau of the Census, 1974 Census of Agriculture, Vol. I, Part 24, Table 14; Vol. II, Part 3, Chpt. 3, Table 44; 1969 Vol. I, Part 33, Section 1, Tables 24 & 25; Vol. II, Part 3, Chpt. 3, Tables 36 & 40.

TABLE 4. SUMMARY STATISTICS FOR SELECTED REGRESSION EQUATIONS EXPLAINING CHANGE IN THE NUMBER OF FARMERS FOR MISSISSIPPI COUNTIES, 1969-1974

Equations and Variables	Betas	R^2	MSE	C_p	F
Equation 1--Commercial Farmers					
1. % of NW L. F. in agriculture, 1970	-.305				
2. % Δ in No. of retirement farms	.349				
3. NW commuter ratio, 1970	.260				
4. % Δ in ave. size farm	-.164				
5. % Δ in No. of covered employment jobs	-.134				
6. Type II county, 1970*	.149				
7. % Δ in No. corporation owned farms	.121				
Equation Statistics:		.525	.0064	3.3	11.7
Equation 2--All Farmers--Nonwhite					
1. % Δ in acres in farms, NW	.881				
2. Type I county, 1970*	.085				
3. % Δ in No. farms with Hired Labor	.116				
Equation Statistics:		.790	.0027	-3.3	97.9
Equation 3--All Farmers--White					
1. % Δ in No. of farms using cont. labor	.252				
2. % Δ in acres in farms, W	.341				
3. % Δ in No. white tenants	.304				
4. % of W.L.F. in agriculture, 1970	-.218				
5. W commuter ratio, 1970	.139				
6. % W.L.F. in manufacturing, 1970	-.134				
7. % Δ in No. retirement farms	.144				
Equation Statistics:		.600	.0054	4.0	15.9

*A county "labor force-commuter" typology was constructed by classifying the state's 82 counties in terms of change in 1960-1970 labor force size and percent of employed residents who commuted. Type I's increased their labor force, but decreased their proportions commuting. Type II's increased both. Type III's decreased the labor force, but increased commuting. Type IV's decreased in both.

Note: Variables not entering Equation 1 were: (1) Change in average value per acre; (2) Change in No. farms using contract labor; (3) Change in No. farms using hired labor; (4) Percent of white labor force in agriculture, 1970; (5) Percent of white labor force in manufacturing, 1970; (6) Percent of nonwhite labor force in manufacturing, 1970; (7) Metropolitan dominance; (8) White commuter ratio, 1970; (9) White migration rate, 1970-75; (10) Nonwhite migration rate, 1970-75; (11) Types I and III; (12) Percent change in motor vehicle registrations. Variables not entering Equation 2 were: (1) Percent nonwhite labor force in agriculture, 1970; (2) Nonwhite commuter ratio, 1970; (3) Percent change No. nonwhite tenants; (4) Percent change No. jobs under covered employment; (5) Percent change No. corp. owned farms; (6) Percent change No. retirement farms; and (7) Nos. 2, 5, 7, 11, and 12 of Equation 1 list. Variables not entering Equation 3 were (1) Types I, II, and III; (2) Nos. 2, 3, 7, and 12 of Equation 1 list; and (3) Nos. 4 and 5 of Equation 2 list.

SESSION B

INDUSTRIALIZATION

BLACK AND WHITE LEADER PERSPECTIVES ON RURAL INDUSTRIALIZATION: PROCESS AND CONTENT DIMENSIONS, D. C. Batchel and J. J. Molnar, Auburn University.

THE IMPACT OF NONFARM OCCUPATION AND INDUSTRY ON THE SIZE AND SCALE OF PART-TIME FARMS, Milton C. Coughenour, University of Kentucky.

SOME SOCIAL AND GEOGRAPHIC PATTERNS IN MISSISSIPPI INDUSTRIAL EMPLOYMENT, Eunice R. McCulloch and Louis H. Bluhm, Mississippi State University.

BLACK AND WHITE LEADER PERSPECTIVES ON RURAL INDUSTRIALIZATION[1]*

Douglas C. Bachtel, Research Associate
Joseph J. Molnar, Assistant Professor
Department of Agricultural Economics and Rural Sociology
Alabama Agricultural Experiment Station
Auburn University
Auburn, Alabama

The role of black residents in rural community affairs has undergone important changes in the last several decades. Increased black voter participation (Campbell and Feagin, 1975), the advent of black return migration (Campbell et al., 1974) plus gradually changing social attitudes have all contributed to a growing number of blacks being elected and appointed to leadership positions in rural areas (Coombs et al., 1976). The emergence of black leaders as a recognized group has implications for many aspects of community decision-making, but is particularly significant for issues of rural development and industrialization (Kim, 1973).

Most rural blacks reside in the South (U. S. Bureau of the Census, 1978) and industrialization is a central theme in this region's development strategy (Morgan, 1979; and Deaton, 1979). Yet, despite the demonstrated uneven consequences of industrial development for rural communities, industrial growth remains a primary interest for many Southern decision makers (Adams, 1978). With the current emphasis placed on industrial development, it is important to note the repeated research finding that some segments of a community receive negligible economic benefits from a new industry while others benefit more directly (Bertrand and Osborne, 1959; Summers et al., 1976; Rogers et al., 1978; and Tweeten and Brinkman, 1976). Retail and business activity generally expands, but not every segment of the local population benefits from industrial growth.

In one study, Beck (1975) found industrialization to have no significant impact on families below the poverty level. Along the same lines, Till (1972), and Abt Associates (1968) concluded that blacks benefited less from industrialization than did whites. Additionally, nonwhites are underrepresented in the work forces of nonmetropolitan manufacturing plants. Where they are hired, they tend to be concentrated in unskilled and semi-skilled jobs (Summers et al., 1976:3). It is the constituency of the poor, less-educated, and unskilled, however, that is most directly represented by black leaders. Thus black leaders may support industrialization on the basis of direct benefits to their constituency in rural areas (Wildavsky, 1964). As white leaders are drawn largely from business, industry, and large-scale farming, their perspective on industrial growth may reflect a fundamentally different set of concerns and interests.

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Important questions then flow from the nature and type of industrial growth black and white leaders are likely to seek and support for their constituencies. A community leader's racial identification may have an important influence on perceptions and evaluations of industrialization and how it is to be achieved. Issues involving site selection and service development for manufacturing plants may be viewed in quite different ways given the nature of an industry and its impact on different groups in a community. The types of new jobs and who will get them may have differential importance for black and white leaders.

One objective of this study is to examine rural community leader perceptions of the industrialization process based on a set of industry characteristics and community impacts. We focus on black and white community leaders in eight nonmetropolitan Deep-South counties. We examine differences between black and white leaders on selected dimensions of industrialization and assess their cumulative ability to differentiate the two groups.

We hypothesize that race is a significant factor affecting perspectives on rural industrialization. Several control variables are introduced into the analysis in order to reduce spurious relationships between race and evaluations of potential community impacts of industrialization.

Rural Leadership and Rural Industrialization

A fundamental operating principal is that community leadership is a pivotal factor in the contemporary development process (Lassey and Johnson, 1971; Kim, 1973; Roepke, 1973; Cary, 1974; and Tweeten and Brinkman, 1976). Communities possessing active leadership structures are often more successful in obtaining Federal grants, improving community service facilities, and attracting new industries (Kale and Lonsdale, 1979). Community leaders often have unique access to community-based economic and human resources, as well as the capacity to mobilize them for industrial development. Rural leaders' growth perceptions have only recently begun to be examined, although Molotch (1976) and Logan (1976) indicate that metropolitan and suburban public officials tend to be growth-orientated.

In many rural areas, the ability to attract and keep industry depends, for the most part, on the community's ability to maintain a competitive position as a place in which to live and work compared to urban areas and other rural locations (Wadsworth, 1974). An active, organized, infrastrucure of influentials is often a key factor in the development of external linkages to industrial interests seeking the land and labor advantages of rural areas. Private interests often find a reliable, responsive local government to be a distinct asset in location decisions because such an area is more likely to provide a relatively stable and predictable environment for the operation of a new plant or facility. Deaton (1979) argues that a well-developed community infrastructure may operate as a psychological factor in the industrial location decision-making process, lending a greater sense of confidence or security to the eventual site selected. While federal agencies, state governments and other organizations may provide funding for community assistance programs, effective local leadership is a critical factor necessary to meet the complex and varied problems associated with development (Seyler and Lonsdale, 1979).

Much of the research on rural leadership has been concerned with descriptive accounts of leader characteristics and leadership networks, as well as limited comparative analysis of leadership structures (Nix et al., 1977). One study found positional leaders to have distinctly different evaluations of community service changes than the commercial sector or the general public (Molnar et al., 1978).

Kaufman (1974) indicates that community leadership groups with strong, extensive communication networks are essential aspects of successful community development programs. As a result, the key contribution of community leadership is coordination (Kaufman, 1974:401). Along the same lines, Mott (1971) concludes that community leadership is increasingly involved with the coordination of activity rather than the direct exercise of power. Several studies that examined the role of leadership in the site selection process show the relative importance of internal factors over which communty leaders may exercise some control (Williams et al., 1978; and Roepke, 1973).

Black and White Leader Attitudes Toward Industrialization

One issue that has received little systematic research attention is black community leadership in rural areas (Parenton and Pellegrin, 1956; Pfautz, 1962). Several factors underly the lack of rural black leadership research. First, recent studies of black leadership have primarily been confined to metropolitan areas (Burgess, 1962; Greenberg et al., 1971; and Patterson, 1974). Second, black leaders have tended to represent small constituencies (Brown, 1971) and the lack of research is "...understandable since there was little power in the black community and most of what there was, was derived from the outside world" (Bernard, 1974:133). A major obstacle to the coherent organization of the black community often has been the predominance of "entrepreneurs" who suggested either individualistic or "other-worldly solutions" to the plight of blacks (O'Brien, 1975:38). In addition, Bernard (1974) suggests that when white researchers have dealt with black people they have tended to investigate deviant behavior and female-headed family issues and not the internal organization and dynamics of black community leadership.

Several lines of thought suggest that systematic differences should exist between black and white leaders on industrial growth issues. First, Lyon (1977) and Bonjean et al., (1969) suggest that racial composition is one of the basic factors of community structure representing major demographic-ecological dimensions along which U.S. communities may vary. It follows that black and white leaders represent constituencies with characteristic expectations for industrialization and fundamental differences in perspective toward industrial growth.

Second, turning to the changing political situation, Coombs et al., (1977) suggest that white leaders' reaction to black political ascendancy has moved toward accommodation from initial avoidance. Nevertheless, major historical differences have existed between both groups (Cox, 1950). As broader issues of common interest continue to confront rural areas, these differences now appear to be a matter of degree than polar extremes.

A third line of reasoning suggests that white leaders may feel threatened by the perceived black population growth that may be generated by industrialization. White leaders may be apprehensive that an increase in employment opportunities for minorities will alter traditional patterns of political representation. Although rural industrial expansion does not automatically insure population growth, Summers et al., (1976) indicates that in a clear majority of cases, the host community does experience an increase.

There are a number of ways white residents may feel threatened by a large or growing black population. Whites may believe that a growing black population may increase service demand requiring a concomitant rise in local taxes (Marshall and Stahura, 1979). Whites may anticipate an increase in the crime rate although there is evidence that blacks are more afraid of victimization than whites (Clemente and Kleiman, 1977; and Feagin, 1970). They may also be concerned about a growing number of blacks in the school system and believe that a larger black enrollment is equated with declining quality (St. John, 1975; and Morgan and Fitzgerald, 1979:335). A growing black or white population may exacerbate rate-consciousness in small towns or rural areas because of the greater visibility of a different race. The more blacks there are in a given area, the more the whites will feel threatened by them due to the fact that whites may believe that blacks will be harder to control (Keech, 1971; and Matthews and Prothro, 1966). A large minority population also helps to induce a more conservative political climate which may in turn heighten black-white status differences (Morgan and Fitzgerald, 1979). Conversely, in places where blacks are in the majority, black leaders may fear an eclipse of influence, given a growing white population and increased economic competition for new employment opportunities.

If black and white leaders: 1) represent disparate sets of interests, 2) are concerned with changes in community racial composition, and 3) are sensitive to the distribution of employment benefits, then systematic differences should exist between black and white leaders on industrialization issues. White leaders may emphasize the need for an expanding local tax base and attracting educated, skilled citizens. Black leaders may be fundamentally concerned with providing clean, safe jobs to constituency with low skills, low education, and a high unemployment rate. We expect these concerns to be reflected in specific differences between black and white leaders as well as in the pattern of factors predicting overall favorability toward industrialization.

METHOD

Sample and Data Collection

The data for this study were collected as part of a research project funded under Title V of the Rural Development Act of 1972. An eight-county area in Alabama[2] was selected on the basis of the low level of development activity present in the area and its location along the route of the Tennessee-Tombigbee Waterway. The project will place the counties on a link between the Tennessee River and the Port of Mobile. The overall aim of the research was to support a concentrated extension and Rural Development Program to respond to opportunities presented by the forthcoming transportation system.

Leaders were selected on a combined positional and snowball procedure so as to ensure the representation of influence in the county (Curtis and Petras, 1977; and Laumann and Pappi, 1976). Individuals holding elected or appointed positions in local government, as well as state and federal officials located in the counties were included in the sample. Leadership positions included: County Commissioners, Major County Department Heads, Community Mayors and County Directors of State and Federal Agencies. The sample also includes members of selected development-related advisory groups and committees. These were individuals with formal involvement in planning, organizing, and decision-making with regard to some aspect of rural development. These groups included: County Rural Development Committees, Regional Planning Commission Advisory Committees, Vocational Education Advisory Committees, and the Minority People's Council. Additional influentials in community development were identified through a nomination procedure included in the questionnaire.

Questionnaire Construction

The central theme and concern in the research was the nature and extent of industrialization that could occur in the study area. The study probed receptivity to industrial development based on a series of potential impacts of new industry. Issues were identified through a review of previous reports completed by the Army Corps of Engineers, the Alabama Development Office, the Minority People's Council and other groups. In addition, unstructured interviews were conducted with Extension Personnel and selected government officials in each county. Based on previous research, various applied reports and theoretical issues involving industrialization, a mail questionnaire was developed. The instrument was reviewed by State-level Extension Personnel, Planning Commission Directors, and pretested with county-level extension staff.

Data Collection

In summer, 1979, the questionnaire was sent to 792 individuals who met the previously discussed criteria of leader. Respondents were initially sent a copy of the questionnaire and a cover letter describing the purpose and intent of the study. Following Dillman's (1977) suggested approach, nonrespondents were sent four successive reminders to promote return of the questionnaire.

A total of 522 leaders completed the questionnaire. The overall return rate was 66 percent, adjusted for the deceased and those no longer residing in the area.

Measurement

Respondents were asked to evaluate their position as to whether to recruit an industry based on a series of conditions associated with the growth, development, or impact of a new industry. The respondents were asked to give their reaction to a new industry locating in their county based on a series of the hypothetical conditions. Leaders were asked to evaluate their position on the basis of each potential impact, other conditions being more or less equal or satisfactory. A "strongly oppose" to "strongly favor" Likert-type response framework was used, coded 1 to 5.

Individual items are compared by race of leader, and then control variables are introduced in order to eliminate the spurious effects of socioeconomic and residential variables. Race was coded as 1 or 2, white, nonwhite. Sex was coded as 1 or 2, male, female. County was coded 1 through 8 for the county of residence.

Leadership position was coded 1 to 3, 1 for elected officials, 2 for appointed and Civil Service officials, and 3 for Advisory Committee participants and self-described "interested citizens" in development decision-making nominated for their influence. Education was measured by six categories ranging from less than high school to completed post-graduate degree. Income was measured by ten categories ranging from $4,999 or less to $25,000 and above.

Results

Table 1 shows mean favorability ratings of new industry by black and white leaders. The items are ordered in terms of favorability as rated by the black leaders. Black leaders were most favorable toward industries that had affirmative action programs, worker participation in decision-making, and a labor union. Black leaders did not seriously object to new road construction or sewage facilities as a condition for bringing in an industry. They did however, become more concerned over an increase in truck traffic, unbalanced employment of women, and the presence of a new minority. Black leaders voiced greatest opposition to industries that would pay low wages to a large number of low-skill individuals, employ special skill workers, or use radioactive materials in manufacturing.

- Table 1 here -

The t-tests[3] showed no differences between black and white leaders on increased truck traffic, new residents, expansion of sewage facilities, and the radioactive materials item. Blacks were more favorable than whites toward labor and work-relations issues. White leaders objected less to a female work force, special skilled labor, and low wage industries. Black-white leader differences are further specified in Table 2.

- Table 2 here -

Table 2 shows adjusted mean scores for black and white leaders controlling location, position and background variables. The items are ordered according to mean favorability expressed by white leaders. White leaders were most favorable to population growth, but indicated moderate favorability toward incurring the infrastructure development costs associated with new construction and the expansion of sewage facilities.

White leaders also were moderately favorable toward affirmative action programs, worker participation, a female work force, and special skilled workers. They became more concerned about truck traffic, low wages, and the presence of a labor union.

The prospect of a new ethnic group and the use of radioactive substances were found to be most objectionable by the white leaders. They were more concerned about a new ethnic group, however, than were the black leaders.

Differences between black and white leaders generally followed the same pattern when controls were introduced. Overall, white leaders tended to give less support to new industry, responding with some level of reservation to almost all the items. White leaders tended to be more conservative with respect to the fiscal impacts of new industry, whereas black leaders seemed to emphasize impacts on workers, but their ratings tended to converge over environmental issues.

- Table 3 here -

Table 3 examines the cumulative ability of the items to discriminate the two groups of leaders. The background characteristics are included in the regression equation as control variables.[4] The data show labor issues to be a primary industrialization-related basis for discriminating black and white leaders.

White leaders were more positive about special skilled jobs, population growth, and low-wage industries. Black leaders were differentiated by their preferences for affirmative action programs, labor unions, and fears about new ethnic groups.

Three of the four control variables were significant predictors of race, indicating important differences between groups on these dimensions. The equations explained 38.5 percent of the dummy variable representing race. The industrialization items explained an increment of 24.5 percent of the variance in the equation, indicating that these issues significantly differentiated black and white leaders over and above the background control variables. These data show the importance of industrialization issues and the potential for cleavage over the community impacts of new industrial development.

Discussion

This study was designed to test the hypothesis that fundamental differences exist between black and white leaders toward the consequences of rural industrial growth. The study departs from previous rural leadership research due to the fact that we focus on black and white community influentials, examining their attitudes toward a range of potential impacts in order to identify variability in their perspectives on rural industrialization.

One of the most significant findings is the systematic nature of the differences which exist between black and white leaders. Labor issues represented one thematic basis for differentiating the two groups. Black leaders were most sensitive to labor-related matters while white leaders tended to be more positive toward general community growth issues such as population increase. White leaders, however, were more sensitive to the fiscal impacts of industrial development, particularly where capital outlays would be directly required to accommodate the new industry or would be necessitated by its presence.

We argued that each group represents different constituencies with differential expectation for industrial development. The black leaders' constituents, the unskilled and lower-educated, would be more immediately effected by marginal industries paying low wages as well as the more innovative operations that require highly trained, skilled personnel. The results suggest a sensitivity among black leaders to the mix of job types presented by an industry, indicating a preference for a distribution of unskilled and skilled jobs to motivate skill development and mobility within the work force.

The moderate degree of favorability white leaders had toward affirmative action programs and worker participation in decision-making seem to indicate that although historic differences have previously separated both groups, those differences now appear to be a matter of degree rather than polarized extremes.

White leaders seem to incorporate the potential for a wide variety of development options in their attitudes. However, regardless of the respondent's racial identity, the lowest level of favorability was expressed toward an industry that used radioactive materials in the manufacturing process. The low level of favorability may be a partial function of the adverse publicity the nuclear industry has received in the national and local media.

Previous investigations of public officials have established the salience of growth orientation issues in development decision-making (Molotch, 1976; and Logan, 1976). The present study further specifies the importance of race as a factor in rural leaders' attitudes toward industrial growth. Future research may examine the relationship between race and other community development issues, particularly issues of site selection, work force recruitment, and training. As black social and political participation in rural community affairs continues to grow, the role of black leaders in development decision-making will assume increasing importance.

FOOTNOTES

[1] This investigation was supported in part through Title V of the 1972 Rural Development Act.

[2] The eight county area is a rural, heavily wooded part of the state. The 1975 county population estimates ranged from 10.3 to 27.5 thousand residents. Population densities ranged between 14.4 to 29.5 residents per square mile. Only one county has zero percent urban, and the largest place in the area had 7.7 thousand residents in 1975. The 1970 proportion nonwhite ranged from 30.3 to 75.4 percent. Some of the poorest counties in the state, 1974 per capita incomes ranged from $2,618 to $3,326, 1970 median educations range from 8.3 to 10.2 years, and the 1970 working-age (18-64) population ranged from 44.7 to 49.8 percent. All had 10 percent or more of their population working outside the county.

[3] Although the data do not constitute a probability sample, significance levels are presented to illustrate relative magnitude of differences.

[4] Regression analysis is employed to predict the dichotomous black-white leader variable because (a) standard errors of estimate are available for regression coefficients, facilitating the evaluation of individual variable effects, and (b) discriminant analysis weights are linearly equivalent to regression coefficients in the dichotomous case, $W = (c + D)b$, where D is the difference between group means and c is a constant (Lindeman et al., 1980:178).

Table 2. Mean favorability toward new industry for black and white leaders: multiple classification analysis adjusting for sex, county, leadership position, education and income.

Industry impact	Mean favorability Black leaders	 White leaders	F-value
Bring many new residents to the country	3.97 N=(88)	4.16 (367)	4.64*
Sex			4.64*
County			.00
Leadership position			2.73***
Education			.09
Income			.62
Combined effects			1.63***
Need major road construction to service the plant	4.16 N=(89)	3.94 (368)	11.28***
Sex			2.43
County			.79
Leadership position			.21
Education			3.63
Income			1.62
Combined effects			1.19
Require expansion of sewage treatment facilities	4.09 N=(88)	3.92 (364)	4.50*
Sex			3.62
County			1.10
Leadership position			.24
Education			.58
Income			.10
Combined effects			1.40*
Be committed to an affirmative action training program for minorities	4.62 N=(88)	3.80 (367)	44.98***
Sex			.21
County			.92
Leadership position			2.16
Education			4.23*
Income			.32
Combined effects			1.94***

Table 1. Mean favorability toward new industry with hypothetical impacts: t-test of differences between black and white leaders.

Industry impact	Mean favorability Black leaders (N=101)	 White leaders (N=403)	t-value*	Probability
Be committed to an affirmative action training program for minorities	$\bar{x}$= 4.64 σ=(0.08)	3.87 (1.00)	8.28	.001
Have worker participation in decision-making as corporate policy	4.57 (.71)	3.75 (1.00)	8.49	.001
Need major road construction to service the plant	4.27 (.64)	3.91 (.71)	3.71	.001
Have a labor union	4.24 (.85)	2.92 (1.20)	11.81	.001
Require expansion of sewage treatment facilities	4.05 (.81)	3.90 (.72)	1.66	.098
Bring many new residents to the country	3.96 (.93)	4.14 (.82)	-1.82	.070
Cause a heavy increase in truck traffic through your community	3.41 (1.10)	3.45 (1.10)	0.33	.740
Employ women in large numbers but few men	3.30 (1.10)	3.63 (1.00)	-2.76	.007
Bring a new ethnic group or minority to the community	3.28 (1.00)	2.66 (1.10)	5.29	.001
Pay low wages to a large number of low-skill individuals	2.62 (1.20)	3.11 (0.06)	-3.58	.001
Employ workers with special skills not held by many local people	2.44 (1.20)	3.64 (1.10)	-8.53	.001
Uses radioactive materials in the manufacturing process	2.26 (1.00)	2.31 (1.10)	-1.22	.224

*Separate variance estimates

Table 2. Continued

Industry impact	Mean favorability Black leaders	 White leaders	F-value
Pay low wages to a large number of low-skill individuals	2.62 N=(88)	3.12 (367)	16.94***
Sex			.54
County			1.77
Leadership position			1.81
Education			.01
Income			.01
Combined effects			2.04***
Have a labor union	4.09 N=(89)	3.00 (368)	81.05***
Sex			.04
County			1.14
Leadership position			1.38
Education			6.75**
Income			1.03
Combined effects			2.98***
Bring a new ethnic group or minority to the community	3.21 N=(89)	2.61 (368)	24.70***
Sex			1.43
County			1.21
Leadership position			1.71
Education			2.82
Income			.19
Combined effects			1.59**
Uses radioactive materials in the manufacturing process	2.17 N=(89)	2.35 (368)	2.63
Sex			12.92***
County			1.29
Leadership position			1.02
Education			5.70
Income			.30
Combined effects			1.33

* $p < .05$
** $p < .01$
*** $p < .001$

Table 2. Continued

Industry impact	Mean favorability Black leaders	 White leaders	F-Value
Have worker participation in decision-making as corporate policy	4.47 N=(88)	3.76 (364)	44.56***
Sex			1.03
County			.38
Leadership position			.92
Education			.51
Income			1.44
Combined effects			1.85***
Employ women in large numbers but few men	3.37 N=(91)	3.65 (366)	5.23*
Sex			.34
County			1.28
Leadership position			1.83
Education			1.24
Income			.47
Combined effects			.82
Employ workers with special skills not held by many local people	2.41 N=(91)	3.57 (366)	77.66***
Sex			7.82***
County			6.23***
Leadership position			2.74
Education			2.95
Income			.03
Combined effects			3.87***
Cause a heavy increase in truck traffic through your community	3.43 N=(91)	3.38 (366)	.44
Sex			9.70***
County			1.50
Leadership position			.48
Education			5.67**
Income			.09
Combined effects			1.28

Table 3. Regression of race of leader on potential industry impacts and selected social status control variables.

	Race of Leader[a]	
Industry impact	Beta	b/S.E.
Workers with special skills	.252***	.084/.015
Affirmative action program	-.225***	-.088/.018
Have a labor union	-.169***	-.054/.015
Bring many new residents	.142**	.068/.024
Bring a new ethnic group	-.106*	-.039/.017
Pay low wages to low-skilled individuals	.083*	.028/.014
Worker participation in decision-making	-.069	-.027/.017
Need major road construction	-.060	-.034/.026
Increase in truck traffic	-.042	-.015/.017
Employ more women than men	.032	.012/.017
Expansion of sewage facilities	-.007	-.066/.025
Uses radioactive materials	-.005	-.018/.015
Controls		
Sex	-.010	-.011/.044
Education	-.036	-.359/.014
Income	.039	.387/.007
Official	.011	.109/.034
Committee participant	-.024	-.239/.043
(Intercept)		1.866

$R^2 = .385$

F-value = 15.5

* coefficient twice its standard error
** coefficient three times its standard error

[a] Black = 1
White = 2

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The Impact of Off-farm Occupation and Industry on the Size and Scale of Part-time Farms[1]

C. M. Coughenour
University of Kentucky

Between 1959 and 1974 there was a 4.3 percent decline of the land in farms and of 1.4 million farms (37.6 percent). But, while all size classes below $10,000 sales lost more than one-half their farms during this 15-year period, sales classes of $20,000 or more had substantial gains in numbers of farms. Of course, estimation of the actual gains and losses is complicated by the change in the 1974 definition of farms and by inflation.

Fortunately, by using farm acreage the change in the structure of farms between 1959 and 1974 can be traced without such distorting influences. As Nichols et al. (1979) point out the importance of both the size (acreage) and sales classifications of farms "depend heavily on the type of agricultural activity involved and will mislead by inappropriately including or excluding some farm units." However, under either type of definition there are substantial numbers of small farms.

Examination of the trends in numbers of farms by acreage classes since 1959 reveals a little noticed fact (GAO 1978:64-71; Nichols et al. 1979), namely the decline in the number of farms in the two smallest size classes--under 50 acres--has not been appreciably more rapid than the decline in the total number of farms. More significantly, the number of such farms was remarkably stable after 1964. On a regional basis, the Northeast, North Central, and West had modest to substantial increases in the farms with less than 50 acres during this decade. Only in the South was there a substantial loss.

Most questions with which policy oriented researchers have recently been concerned have been focused on causes of the decline in farms and the growth of large farms (CBO 1978; GAO 1978; ESCS 1979). Understandably, factors such as the cost-price squeeze, advances in technology, and the varied impacts, many unanticipated, of government agricultural and tax programs have been most often identified as principal causal factors. When attention has been focused on the situation of small farms, almost all of the factors enumerated have been adverse, so much so that one may justifiably wonder why they have not long since disappeared. On the positive side Marshall and Thompson (1976) have contended that internal efficiency in the use of farm resources may not be so low as is commonly supposed. But, regardless, the small farm typically produces little net income so that it is obvious that they do not exist primarily because they provide income adequate to sustain a family in today's society.

Three factors most often mentioned to account for the persistence of small farms have been (1) tax loss, (2) inflation hedge, (3) fixed asset of labor, and (4) off-farm income (Tweeten 1969:171-8; Madden and Partenheimer 1972: 104-6; Carter and Johnston 1978:741-3; Woods 1973; Larson 1976). While the relative importance of these factors is the subject of controversy, the important point is that for a big majority of small farmers, namely those with off-farm work, the factors converge. That is, the family with a regular source of off-farm earned income often can satisfy current income needs while reducing taxable income, realizing inflationary gains to capital in land, and enjoy a preferred lifestyle. Thus, explanation of the persistence of small farms shifts attention to consideration of the persistence of part-time farms.

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Even though the failure of farmers to report off-farm work in recent agricultural censuses probably results in under enumeration, off-farm work of farm operators has increased substantially since 1929, when it was first recorded by the Agricultural Census. Less than 70 percent of farm operators worked off the farm in 1929 and most did so only occasionally. By 1940, however, the proportion working 100 or more days off the farm was greater than the proportion working less. Moreover, during World War II and between 1964 and 1969 the proportion with full-time off-farm jobs, i.e., 200 or more days, jumped considerably. In consequence of these overall trends, a quite different structure had come into existence by 1974. It is increasingly dualistic as is evident by the fact that while 45 percent of American farmers still are full-time operators, 35 percent have full-time off-farm jobs. Part-time farmers, i.e., those working 100 or more days off the farm, had become almost as numerous as full-time farmers, and for the big majority the off-farm work is in nonfarm employment.

Studies of multiple job holding by farmers have shown that:

1. The incidence tends to decline with age and as farm income increases, though in recent years it is quite high (above 50 percent) until farm income exceeds $25,000 (Hathaway and Waldo 1964; Larson 1976; Carlin and Ghelfi 1979).
2. There are three patterns: (a) farmers who are in the process of shifting from full-time farming to full-time nonfarm employment, (b) farmers who sporadically supplement farm income with nonfarm jobs, and (c) those who undertake dual careers--farm and nonfarm (Hathaway and Waldo 1964; Bertrand 1967; Loomis 1964; Coughenour and Gabbard 1977).
3. For an important, possibly increasing, proportion farming is the second career. That is, multiple job holding is a way into farming (Moore and Wayt 1957; Coughenour and Gabbard 1977). Some eventually succeed in becoming full-time farmers.
4. Young farmers tend to hold nonfarm jobs in industries subject to cyclical instability and to diminishing levels of employment arising from technological change while older farmers--those over 65 years of age--tend to be employed in government (Hathaway and Waldo 1964).
5. In a larger sense, there has been a progressive integration of the farm and nonfarm labor markets (Fuller and Van Vuuren 1972; Huffman 1977; Fuller and Mason 1977) which complements the integration of agricultural industry in the total national and international economy.

As Carlin and Ghelfi (1979) emphasize, however, "data are not currently available on...off-farm employment. Little is known about the occupations and industries in which farm people are working. The conditions of their employment...are also relatively unknown." These two factors are related (Edwards et al. 1975; Freedman 1976; Stolzenberg 1975; Beck et al. 1978). Thus, we may expect that the particular occupations and industries in which farm operators and their wives are employed are quite important in the survival of the small farm as well as the welfare of families on small farms as Hathaway and Waldo indicated.

The Kentucky Study

A 1979 Kentucky survey provides information on farm size and scale as well as the occupations and industries of farm operators and their wives. The data were collected by mail questionnaire from a sample drawn from registered voters.[2] The response rate was 69 percent.

By way of context, Kentucky lost 27.1 percent of its farms between 1959 and 1974 (using the 1959 definition of farms). The small farms--those with less than 50 acres--declined by 29.1 percent, and between 1969 and 1974 the 11.1 percent loss was below the 12 percent loss of farms of all sizes in the state.

In terms of the 1974 farm definition there were 102,053 farms in Kentucky of which 29.7 percent had less than 50 acres and 34.2 percent less than $2,500 in farm sales. In 1979, 20.9 percent were estimated to have less than 50 acres and 23.8 percent to have sold less than $2,500 in farm products. While it is reasonable to assume that this reflects a continuation in the long-term decline of small farms during the four-year period, such a conclusion must be tentative due to non-reporting.

Off-farm employment in Kentucky has closely paralleled national trends. In 1974, 39.1 percent of Kentucky farmers worked off the farm 200 or more days and 48.1 percent worked 100 or more days. Moreover, for the farmers reporting principal occupation it was other than farming for 45.8 percent. In the 1979 state survey the 1974 farm definition was used, and a farmer or his wife is regarded as being employed off the farm if he listed a nonfarm occupation. On this basis, 43.9 percent of the survey respondents were full-time farmers and 41.6 percent had an off-farm occupation; for an additional 14.5 percent of the households either the husband or wife was farming full-time and the other had a nonfarm occupation.

The principal interest of this paper is in the impact of off-farm occupation and industry on farm size and scale. This is difficult to assess without making some rather strong assumptions, but it can be approximated. Seventy-nine percent of the part-time farms sold less than $10,000 in farm products in 1978 compared to 51 percent of the full-time farms. Five out of eight of the farms with less than 50 acres as well as those with less than $2,500 in sales were part-time. Thus, as often noted part-time farms tend to be relatively small, and the impact of off-farm work apparently has been to maintain many of the smallest farms.

Clearly, it is important to know the relationship between the off-farm occupation and industry of part-time farmers. If off-farm work is a resource which enables families to acquire and maintain a farm, what difference does type of occupation or industry of employment make? To what extent do the occupations or the industries in which farmers are employed differ from those of all employed workers in Kentucky? Do the distributions suggest structural differences between those who have farms and those who do not? Moreover, what is the relationship between occupation or industry and the size or scale of the farming operation?

Occupational distributions for part-time farmers and the total sample are shown in Table 1. For both part-time farmers and the total sample, the major occupation categories are managerial, craftsmen, and operatives. More than six out of ten males have these occupations. Somewhat fewer male part-time farmers than for the total sample are professionals, semi-professional and technical workers, and sales workers, while a somewhat larger percentage of part-time farmers are laborers. While nearly one-half of the farmers are in white collar occupations, 57 percent of the total sample are white collar. But, despite this important difference, the overall distributions are similar, and the principal conclusion must be that part-time farmers in Kentucky are found in all major occupational groupings much as are all employed males in the state.

By industry, part-time farmers are similarly widely distributed in much the same way as the total sample (Table 2). The largest differences are in agriculture, forestry, and fisheries, and transportation and communications.

The smaller proportion of part-time farmers than the total sample in agriculture, forestry and fisheries is doubtless primarily due to the presence of the full-time farmers and farm laborers in the total sample. Proportionately more part-time farmers than in the total sample are employed in transportation and communications. Employment in mining, construction, nondurable manufacturing, wholesale and retail trade, and transportation and communications tends to fluctuate more with the business cycle than for other industries and, thus, is less secure. Thirty-seven percent of the part-time farmers compared with 30 percent of the total sample are in these industries. But, despite this difference, Kentucky's part-time farmers are found in all types of industries as are male workers generally. Part-time farmers have become, if this has not been always the case, integrated into the total economy of the state.

The next step of the analysis is to examine the relationship between the size and scale of part-time farms and the type of occupation or industry of off-farm employment. For this purpose it is convenient to combine some of the occupational and industry categories having relatively few cases.

With respect to occupation the principal difference in farm scale as represented by farm sales is between the traditional white collar (professional, managerial, and clerical and sales) and blue collar (craftsmen, operatives, service, and laborers) occupations. While about seven out of ten of the part-time farmers in the white collar occupations had farms with less than $10,000 in farm sales in 1978, more than eight out of ten of the blue collar part-time farmers had farms of this scale (Table 3).

Most part-time farmers employed in construction (84.1 percent) and in the manufacturing of durable goods (90.7 percent) had farms with sales of less than $10,000 (Table 4). Farmers employed in wholesale and retail trade (63.3 percent) or, surprisingly, the services (73.0 percent) least often had farms this small.

When acreage is used as the measure of farm size, the relationship with type of occupation is quite similar to that found with farm sales (Table 5). Professionals and managerial workers tend to have relatively large farms while workers in the services, laborers, and operatives have relatively small farms. More than four out of ten of the farms of the latter are less than 50 acres compared with about one out of four of the highest ranking occupations.

Farm size by industry, however, differs from that for farm sales (Table 6). While those engaged in durable goods manufacturing (44.7 percent) most often had less than 50 acre farms, a substantial proportion of the part-time farmers in wholesale and retail trade (39.7 percent) also had small farms.

By contrast, part-time farmers employed off-the-farm in finance, insurance, and real estate (18.2 percent) least often had small farms.

Although it is apparent that farms of varying size and scale are widely distributed by type of industry, there are interesting contrasts, especially for workers in durable goods manufacturing, wholesale and retail trade, and public administration. A relatively high proportion of the farms of manufacturing workers are small sized (less than 100 acres) and a relatively large proportion are small scale (less than $10,000 sales). Workers in wholesale and retail trade also tend to have relatively small farms, but in farm sales they are highest of the industry groups. By contrast, workers in public administration tend to have farms that are relatively large, but a relatively high proportion (79.5 percent), however, had sales of less than $10,000 in 1978.

Although it would be important to examine occupational distributions within industry groups as well as differences in farmer characteristics, location, etc., in attempting to explain performance efficiency, this would lengthen this paper beyond present time and space limits.

The analysis in this paper reinforces and expands findings from previous studies in several respects:

1. The slowdown in the long-term decline in the number of farms is primarily due to stability in numbers of small farms which have increased in number and as a proportion of all farms nationally and in all regions except the South.
2. This has been primarily associated with the increase nationally in the proportion of farms with off-farm income and the rise in the proportion of family income from off-farm sources.
3. With respect to the size and scale of farms, the integration of the farmers into local nonfarm economies is one of the most significant factors affecting the structural change and present condition of agriculture. In Kentucky, although there are notable differences in the occupational and industrial distributions of part-time farmers and all workers, the differences are less important than the overall comparability of these distributions. Thus, at least for the male heads of part-time farms, the occupational (and income) welfare will respond to developments affecting the nonfarm economy in much the same way as for nonfarm male workers generally in Kentucky.
4. Occupation and industry impact agricultural structure in different ways. For males operating part-time farms, occupation has two effects: (a) relatively fewer male farm operators have white collar occupations off the farm than for the total population, and (b) male white collar workers with farms tend to have relatively larger farms in both size and scale of operations. Clearly, the average size and scale of part-time farms would be larger if part-time farmers conformed in their occupational distribution to that of all male employed workers.
5. Possibly due to the concentration of operatives and/or laborers in the manufacturing of durables, it has effects that are similar to occupation in that a slightly larger proportion of part-time farmers are in this industry, and, compared with workers in other types of industries, the size and scale of the farms operated tends to be small.
6. However, the most important impact of industry of employment is possibly on the performance effectiveness of the farming operation. That is, there are notable differences among industries in the distributions of farm sales and farm acreages, suggestive of differences in value of sales per acre.

n Farmers employed in the wholesale and retail trades have substantially higher performance rates in this respect than do those employed in public administration.

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Footnotes

2. The cooperation of James A. Christenson in designing and conducting the survey is gratefully appreciated.

Table 1. Occupation of Employed Males, Part-Time Farmers and Total Sample: 1979 Survey

Occupation	Part-Time Farmers	Total Sample
	-percent-	-percent-
Professionals	6.7	9.2
Semiprofessional & Technical	4.2	7.7
Managerial	29.3	29.1
Clerical	5.5	5.2
Sales	3.4	6.0
Craftsmen	17.5	16.1
Operatives	18.9	16.4
Service Workers	2.5	2.2
Laborers	8.3	6.0
Unclassified	3.6	2.0
Total	100.0	100.0

Table 2. Industry of Employed Males, Part-Time Farmers and Total Sample: 1979 Survey

Industry	Part-Time Farmers	Total Sample
	-percent-	-percent-
Agriculture, Forestry, Fisheries	4.9	10.1
Mining	5.0	5.9
Construction	9.8	8.4
Manufacturing-Durable	14.1	11.4
Manufacturing-Nondurable	7.5	7.1
Transportation and Communication	14.7	8.8
Wholesale & Retail Trade	12.1	12.8
Finance, Insurance, Real Estate	4.3	3.2
Business and Repair Services	1.7	3.4
Personal Services	1.3	1.4
Entertainment, Recreation	0	0.4
Public Administration	7.5	7.4
Professional & Related Services	8.1	10.1
Unclassified	8.9	9.5
Total	100.0	100.0

Table 3. Farm Sales of Part-Time Farmers by Off-Farm Occupation: 1979 Survey

Occupation		Total	Value of Sales: 1978 $1,000-$2,499	$2,500-$9,999	$10,000-$19,999	$20,000-$39,000	$40,000 or more
					percent		
Professional[1]	(N=67)	99.9	28.4	41.8	20.9	4.5	4.4
Managerial	(N=151)	100.0	25.8	45.7	14.6	9.9	4.0
Clerical and Sales	(N=46)	100.0	39.1	34.8	17.4	4.4	4.3
Craftsmen	(N=106)	100.0	36.8	49.1	8.5	3.8	1.9
Operatives	(N=109)	100.0	42.2	45.0	10.1	1.8	0.9
Service and Laborers	(N=65)	100.0	43.1	46.2	6.2	4.6	0
Unclassified	(N=21)	100.0	38.1	23.8	23.8	9.5	4.8

[1] Professional, Semi-professional and Technical

Table 4. Farm Sales of Part-Time Farmers by Off-Farm Industry: 1979 Survey

Industry		Total	Value of Sales: 1978 $1,000-$2,499	$2,500-$9,999	$10,000-$19,999	$20,000-$39,999	$40,000 or more
					percent		
Agriculture, Forestry, Mining	(N=50)	100.0	42.0	34.0	10.0	14.0	2.0
Construction	(N=63)	100.0	31.7	52.4	12.7	1.6	1.6
Manufacturing-durable	(N=75)	100.0	42.7	48.0	9.3	-	-
Manufacturing-nondurable	(N=43)	100.1	27.9	53.5	14.0	4.7	-
Transportation & Communication	(N=62)	99.9	37.1	38.7	14.5	4.8	4.8
Wholesale & Retail	(N=68)	100.1	32.4	30.9	19.1	11.8	5.9
FIRE[1]	(N=22)	100.0	27.3	50.0	4.5	4.5	13.6
Services[2]	(N=63)	100.0	34.9	38.1	20.6	3.2	3.2
Public Administration	(N=44)	100.0	22.7	56.8	9.1	11.4	-
Unclassified	(N=47)	100.0	40.4	42.6	14.9	2.1	-

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[1] Finance, Insurance, and Real Estate

[2] Business and Related, Personal and Professional and Related Services, Entertainment and Recreation

Table 5. Size of Farm of Part-Time Farmers by Off-Farm Occupation: 1979 Survey

Occupation		Total	Less than 50	50-99	100-179	180-259	260 or more
		Size of Farm (acres)					
		- - - - - - - -p e r c e n t- - - - - - - -					
Professionals[1]	(N=67)	100.1	26.9	23.9	25.4	10.4	13.5
Managerial	(N=152)	100.0	27.6	21.7	23.7	11.8	15.1
Clerical & Sales	(N=46)	100.0	32.6	21.7	23.9	15.2	6.6
Craftsmen	(N=106)	100.0	34.9	29.2	27.4	5.7	2.8
Operatives	(N=108)	100.0	41.7	25.0	17.6	12.0	3.7
Service & Laborers	(N=66)	99.9	40.9	30.3	13.6	13.6	1.5
Unclassified	(N=21)	100.0	42.9	23.8	9.5	4.8	19.1

[1] Professional, Semi-professional and Technical

Table 6. Size of Farm of Part-Time Farmer by Off-Farm Industry: 1979 Survey

Industry		Total	Less than 50	50-99	100-179	180-259	260 or more
		Size of Farm (acres)					
		- - - - - -p e r c e n t- - - - - - -					
Agriculture, Forestry, Mining	(N=51)	100.0	23.5	29.4	21.6	17.6	7.9
Construction	(N=63)	100.0	36.5	20.6	30.2	4.8	7.9
Manufacturing-durable	(N=76)	99.9	44.7	23.4	25.0	3.9	3.9
Manufacturing-nondurable	(N=43)	100.1	37.2	23.3	25.6	9.3	4.7
Transportation & Communication	(N=62)	100.0	33.9	22.6	19.4	14.5	9.7
Wholesale and Retail	(N=68)	100.0	39.7	17.6	11.8	14.7	16.2
FIRE[1]	(N=22)	99.9	18.2	31.8	31.8	4.5	13.6
Services[2]	(N=63)	100.0	23.8	31.7	17.5	15.9	11.1
Public Administration	(N=44)	100.1	22.7	27.3	22.7	13.6	13.6
Unclassified	(N=46)	100.0	41.3	28.3	21.7	8.7	-

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[1] Finance, Insurance and Real Estate

[2] Business and Related, Personal, Entertainment and Recreation, Professional and Related

SOME SOCIAL AND GEOGRAPHIC PATTERNS IN MISSISSIPPI INDUSTRIAL EMPLOYMENT

Eunice R. McCulloch and Louis H. Bluhm
Department of Sociology - Mississippi State University
Mississippi State, Mississippi

Introduction

Mississippi, like many other states, has experienced considerable growth in the industrial sector of its economy. This may be due in part to the southern region's general attractiveness to industry. It is also due in large part to the efforts of state and local officials to recruit industry, particularly to non-metropolitan, rural areas. These policies are pursued in the belief that the resulting increase in employment opportunities will automatically benefit a community. Until more information is available on the consequences of industrialization, this idea remains essentially an inadequately tested assumption. The purpose of this study is to expand our knowledge of some of the results of industrial development.

Mississippi appears to be in a transitional stage; it is essentially a rural state in the process of industrializing. As of 1970, 55.5% of its population resided in rural areas (Bryant 1977:23). The urban population percentage for Mississippi in 1970 was 44.5 compared with 73.5% for the U.S. and 64.6% for the Southern region (Bryant 1977:23). There are relatively few large urban areas in the state. Of the South's 54 cities with populations of over 100,000, Mississippi has only one, its capital. There are none with populations of 50,000-100,000, eight with 25,000-50,000, 15 with 10,000-25,000, and 23 with populations between 5,000-10,000. There are 23 counties with no urban areas at all. These patterns help to contribute to an atmosphere of "ruralness" in the state (1970 Census data, Number of Inhabitants).

However, the U.S. census indicates that from 1930 to 1970 there has been a steady increase in the relative proportion of persons employed in manufacturing, figure 1 (see also Table 1). For example, even though the total work force dropped in 1960, the proportion employed in manufacturing did not show the same decline.

Statistics relating to the value of manufactured goods reflect to an even greater extent the increasing importance of manufacturing in Mississippi (Table 2). These data show that, with the exception of a substantial decline in 1939, the manufacturing output measured in monetary terms increased rapidly, particularly after 1960.

Geographic Structure

One aspect of industrialization which merits investigation is the nature and distribution of the work force employed in manufacturing. The information derived from such an analysis could suggest the relative benefits which accrue to different segments of the population and different areas of the state. Furthermore, since Mississippi is in a period of transition, we need to have some idea of the trend of major changes in local communities, the implication being that some options may be available in formulating policies influencing the course of future social change in the state if appropriate information is availiable.

However, data based on the entire state do not indicate if change is focused in certain areas or if it is state-wide. To help answer this question factor analysis of census data (Bryant:Table 27) was used to group counties on the basis of similarities in work force structure. Four geographic groups were identified, figure 2.

Group 1: Rural-Industrial

Fifty-seven counties were high in the per cent of the work force employed in manufacturing. It is interesting to note that these counties are predominantly rural and characteristically have small towns and moderate agricultural (extractive) employment.

Group 2: Agricultural

There were 13 counties high in agricultural (extractive) employment. These counties are all located in the delta region with the exception of one county which is located in the black-belt agricultural region.

Group 3: Urban

There were ten counties which seem to be predominantly urban. These counties include several important agricultural counties in the delta area, but the urban pattern of employment is apparently of greater statistical importance than the agricultural influence.

Group 4: Educational

There were two counties with high proportions of the work force employed in educational institutions. The two counties so designated were those in which the large state universities are located.

The relative strength for all occupational sectors of the work force for each of these four types of counties is given in figure 3 (see also Table 3). It is clear that Wholesale and Retail Trade and Health and Other Services tend to be centered in the counties which constitute Group 3: Urban. It is also apparent that, although extractive employment continues to be of some importance in Group 1: Rural-Industrial counties, the greater employment in construction, transportation, communication, utilities, business, and financial services in these counties as compared to Group 2: Agricultural counties implies that the process of industrialization may be well under way.

Industrialization and Urbanization

This analysis of the work force also implies that industrialization in Mississippi, speaking in relative terms, is as much a rural phenomenon as it is an urban one. In fact, the greatest relative impact of industrialization seems to be on the marginal agricultural counties of the state, not the urban areas. It is true that there are generally more industrial firms in urban areas; it is true that in absolute numbers there are typically more people involved in manufacturing in urban areas. But the proportion of the total work force employed in manufacturing in the rural areas is larger, indicating that the rural communities are more dependent economically on manufacturing than their urban counterparts.

Race and Sex Patterns in the Work Force

The degree of involvement of various sub-groups in manufacturing is important in evaluating some of the consequences of industrial development. A regression analysis, based on the relationship between the percentage of the total work force employed in manufacturing and the percentage employed in manufacturing for each of several segments of the work force (i.e., black, white, male, female, black males, white males, black females, and white females) made it possible to graph the relative representation in the labor force of these different groups. A quadratic term was included to allow for the possibility of non-linear relationships.

Blacks and Whites. Results of the regression analysis using state wide data show that, first, there is a direct relationship between the white work force representation and overall rate of manufacturing employment, figure 4. The black work force representation, however, tends to be curvilinear. That is to say, the proportion of the black work force employed in manufacturing tends to decline as overall manufacturing increases (for correlations and significance levels, see Table 5).

In the 57 rural counties (Group 1: Rural-Industrial) having high industrial employment, the same general trends are found. That is, the black work force tends to be less represented as the rate of manufacturing increases, figure 7.

However, in the 13 agricultural counties (Group 2: Agricultural) where there is fairly low overall employment in manufacturing, there is a somewhat different pattern. Black and white employment are similarly correlated, but the white population has considerably higher levels of representation in industrial employment than do blacks, figure 10a. Data for agricultural employment (Bryant 1977:Table 27) show the reverse, that is, blacks have a higher representation in agriculture than do whites. The average representation in agriculture for the black population for these counties is 33.3% and 19.9% for the white population. This implies that in this predominantly agricultural area, the black work force seems to lag behind the white work force in terms of being absorbed into industrial employment.

The pattern for urban counties (Group 3: Urban) is shown in figure 12a and indicates similarities in the patterns of employment for the black and white segments of the work forc[illegible]ever, the point should be made that the correlation obtained for th[illegible] work force was low and was not statistically significant (see T[illegible] 5).

Males and Females. A comparison of females and males on a state wide basis shows that males have a higher representation at moderate levels of overall manufacturing employment, whereas females have a higher representation as manufacturing employment increases, figure 5.

Similarly, in the 57 counties, which comprise Group 1: Rural-Industrial, a comparison of females and males, figure 8, shows that males are more highly represented in the 24% - 36% range of manufacturing whereas females have a relatively higher representation at the higher levels of overall manufacturing employment.

The data for the agricultural counties (Group 2: Agricultural) indicate that females are over-represented compared to males, figure 10b. However, the correlation obtained for the female work force was not statistically significant.

In the urban counties (Group 3: Urban) there appears to be a considerable difference between male and female levels of representation in employment, figure 12b. The greater representation in employment of males most likely reflects the type of employment opportunities available. The pattern and levels shown for females, although not statistically significant, might reflect the greater opportunity for other types of employment available for women in urban areas.

Black males, white males, black females, and white females. A state wide break-down by both sex and race, figure 6, shows the relationship between increasing levels of industrialization in the state and the relative representation of wh[illegible]males, black females, white males, and black males. As the overa[illegible]e of employment in manufacturing increases, high proportions of both the black and white female work forces tend to be concentrated in manufacturing. Black males have a fairly high level of representation at moderate levels of industrialization but they lose ground rapidly at the higher levels of industrialization. White male representation is very nearly linear to overall manufacturing employment.

A pattern similar to the state wide pattern is found in the high manufacturing counties (Group 1: Rural-Industrial) with white females having the highest representation under conditions of high industrialization followed by black females, white males, and black males respectively, figure 9. That is to say, as the overall rate of manufacturing employment increases, the disparity between groups increases with females (particularly white females) having relatively higher employment representation and with black males having the least.

In the agricultural counties (Group 2: Agricultural) both black females and black males are proportionately less well represented in manufacturing employment than are white females and white males, figure 11. It should be noted that a high correlation, statistically significant, exists for the black female data, but that the correlation for the white female work force is low and statistically insignificant, Table 5.

For the urban counties (Group 3: Urban), figure 13, the only significant relationships that can be established for the race and sex sub-groups is that for the white males. The lack of statistical significance may be due to a small number of cases.

Group 4 Counties: Educational. It was not possible to obtain regression curves for group 4, since there were only two counties in this category. Data for these counties compared with the other groups are presented in terms of percentages, Table 4.

As can be seen from this table, the Group 4: Educational counties have the lowest dependence on manufacturing employment as a whole and also for most of the various race and sex sub-groups being considered. Lowest representation is that for white females with black females next. Highest representation is found in the black male work force in one county and white male work force in the other.

Growth Patterns of Manufacturing Development

Although manufacturing employment for the entire state has increased over the past several decades, it would be of interest to policy makers if historical trends could be linked to geographic areas. Factor analysis was used to group the counties on the basis of percentage of total work force employed in manufacturing for the period 1930-1970. Five geographic-historical trends were identified, figure 14. A general indication of how the five trends differed was obtained by plotting the mean values of the per cent of work force employed in manufacturing for each of the years being considered for each factorial group, figure 15. Most of the counties (factor 1, N=65) exhibit a steady increase for the time period under consideration. Others, which include those with the largest urban centers (factor 2, N=13) show a slightly slower increase after a decline previous to 1940. The three patterns for the remaining four counties show fluctuation in manufacturing development rather than any type of steady change.

The growth curve for the 65 factor 1 counties indicates that a noticeable increase in the rate of manufacturing employment occurred around 1940 and that growth included most of the counties high in manufacturing (Group 1: Rural-Industrial) for 1970 and all of those high in agricultural (Group 2: Agricultural) and educational employment (Group 4: Educational). Those similarities can be seen in a comparison of figure 2 and figure 14. The exceptions are located in the southern part of the state. These counties, although high in relative manufacturing employment in 1970, experienced a growth rate which was nondefinitive.

The counties with large urban centers show a leveling-off of the rate of increase in manufacturing employment after 1950 which may indicate a trend toward an urban-type work force distribution. In short, 1950 seems to be a watershed in the sense that the growth of the industrial work force for urban areas slows but accelerates in certain parts of the rural areas.

Summary

The pattern of growth of manufacturing in Mississippi is one of relatively increasing importance of manufacturing employment in those counties which are neither primarily urban nor agricultural. At lower levels of overall manufacturing employment, the balance seems to favor males over females and blacks over whites. At higher levels of manufacturing employment, the balance shifts in favor of females and whites. Explanation for the greater relative employment of females in industry may be due to the nature of the industries, but the reasons for the lower representation of the black work force are unclear.

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TABLE 1.

SIZE OF EMPLOYED WORK FORCE AND NUMBER OF PERSONS EMPLOYED IN MANUFACTURING

	Year						
	1930	1940	1950	1960	1970	1975*	1985**
Total work force	844,887	727,455	716,282	682,339	718,948	870,800	1,049,500
No. of persons employed in manufacturing	65,266	66,765	90,336	130,804	185,869	230,200	299,100
Per cent employed in manufacturing	7.7	9.2	12.6	19.2	25.9	26.4	28.5

*estimated
**projected

Estimated and projected figures for 1975 and 1985 were used from the data presented in Mississippi Statistical Abstract, 1978 (Division of Research, College of Business and Industry, Mississippi State University:289)

TABLE 2

MANUFACTURING OUTPUT IN MISSISSIPPI

Year	Value added by manufacturing (million dollars)
1929	107.3
1939	73.5
1947	300.2
1958	542.2
1960	697.4
1961	759.3
1963	1,017.0
1967	1,635.3
1968	1,946.9
1971	2,237.2
1972	2,922.7

TABLE 3

MEAN WORK FORCE DISTRIBUTION OF COUNTY GROUPS

			Per Cent of Total Work Force									
Group	N	Description	Extractive	Construction	Manufacturing	Transportation, Communication, Utilities	Wholesale and Retail Trade	Business and Financial Services	Private Households	Health and Other Services	Educational Services	Public Administration
1	57	High in Manufacturing Employment	10.0	7.8	34.2	5.3	15.4	3.6	3.6	8.9	7.9	3.1
2	13	High in Agricultural Employment	26.0	5.2	16.3	4.9	16.5	3.1	6.6	8.6	9.7	3.3
3	10	Urban	5.2	8.8	18.1	7.3	20.8	6.4	4.5	14.5	9.2	5.3
4	2	High in Educational Employment	6.3	5.5	13.0	3.6	14.4	4.0	4.6	12.8	32.0	3.8

TABLE 4

WORK FORCE REPRESENTATION FOR GROUP 4: EDUCATIONAL

	Per Cent of Each Work Force in Manufacturing								
Counties in Group 4: Educational	Total Work Force	White	Black	Males	Females	White Male	Black Male	White Female	Black Female
Lafayette	11.7	11.8	11.5	12.0	11.1	12.1	11.9	11.0	11.2
Oktibbeha	14.3	13.7	15.9	17.4	9.2	16.7	19.4	8.8	10.2
Means for Group 4: Educational	13.0	12.8	13.7	14.7	10.2	14.4	15.7	9.9	10.7
Means for Group 1: Rural-Industrial	34.3	34.0	34.9	34.4	34.1	33.9	35.0	33.7	34.3
Means for Group 2: Agricultural	16.3	19.2	12.1	14.9	18.8	17.9	11.3	23.4	13.3
Means for Group 3: Urban	18.1	17.7	18.4	22.7	10.9	22.3	23.2	10.6	11.2

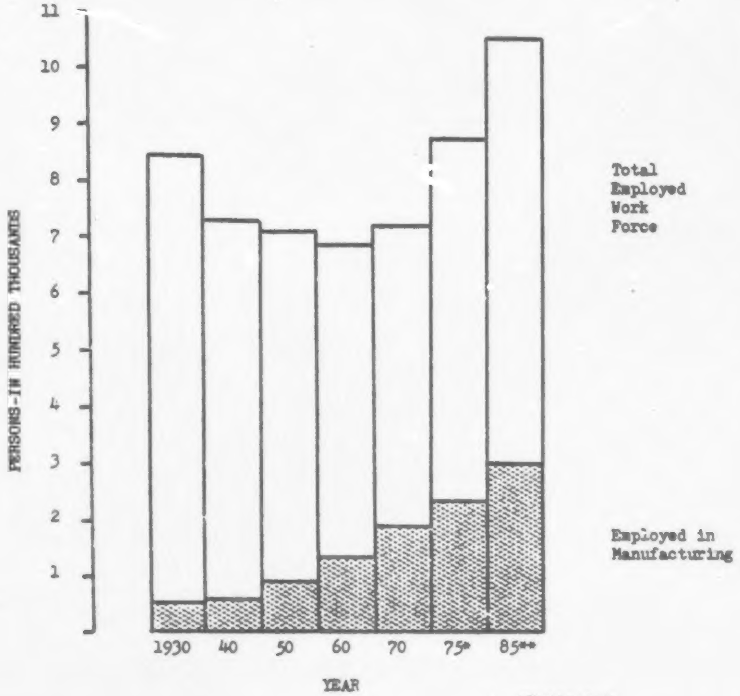
TABLE 5

WORK FORCE REPRESENTATION CORRELATIONS WITH PER CENT
OF EMPLOYMENT IN MANUFACTURING

Multiple R
(Significance)

County Group	WORK FORCE							
	Black	White	Female	Male	Black Males	White Males	Black Females	White Females
All Counties n = 82	.87097 (+.01)	.96725 (+.01)	.84919 (+.01)	.91425 (+.01)	.78718 (+.01)	.89557 (+.01)	.80379 (+.01)	.79653 (+.01)
Rural Industrialised n = 57	.56910 (+.01)	.95057 (+.01)	.74076 (+.01)	.77893 (+.01)	.38988 (+.05)	.78003 (+.01)	.53082 (+.01)	.74512 (+.01)
Agricultural n = 13	.86108 (+.01)	.80296 (+.05)	.66865 (N.S.)*	.89371 (+.01)	.76699 (+.05)	.91727 (+.01)	.84978 (+.01)	.41377 (N.S.)*
Urban n = 10	.47063 (N.S.)*	.97518 (+.01)	.77638 (N.S.)*	.97322 (+.01)	.57391 (N.S.)*	.97985 (+.01)	.59091 (N.S.)*	.73484 (N.S.)*

* Not significant at .05.



*Estimated
**Projected

Figure 1. Employment in manufacturing in Mississippi for 1930-1985 relative to the total work force.

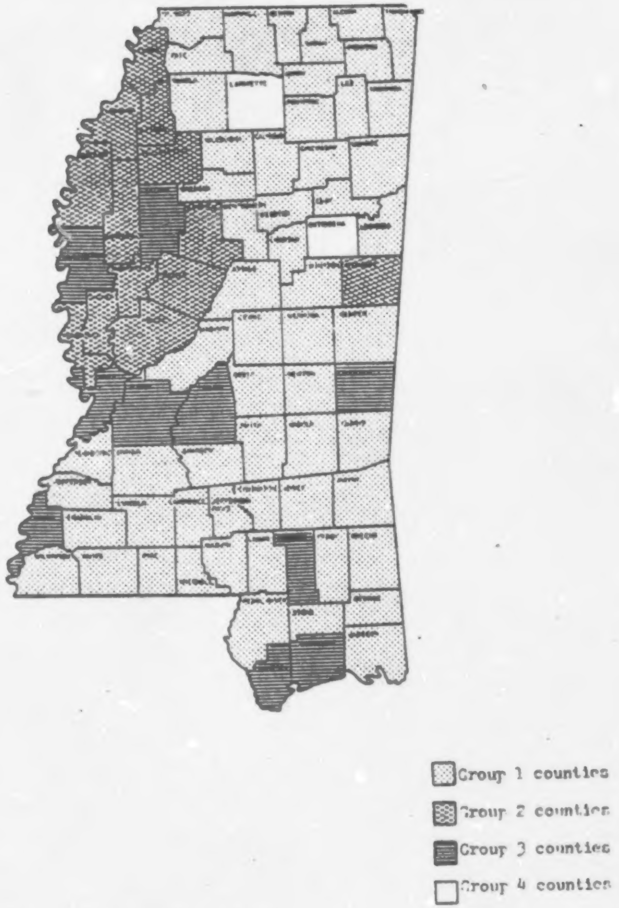

Group 1 counties
Group 2 counties
Group 3 counties
Group 4 counties

Figure 2. County groups based on work force distributions.

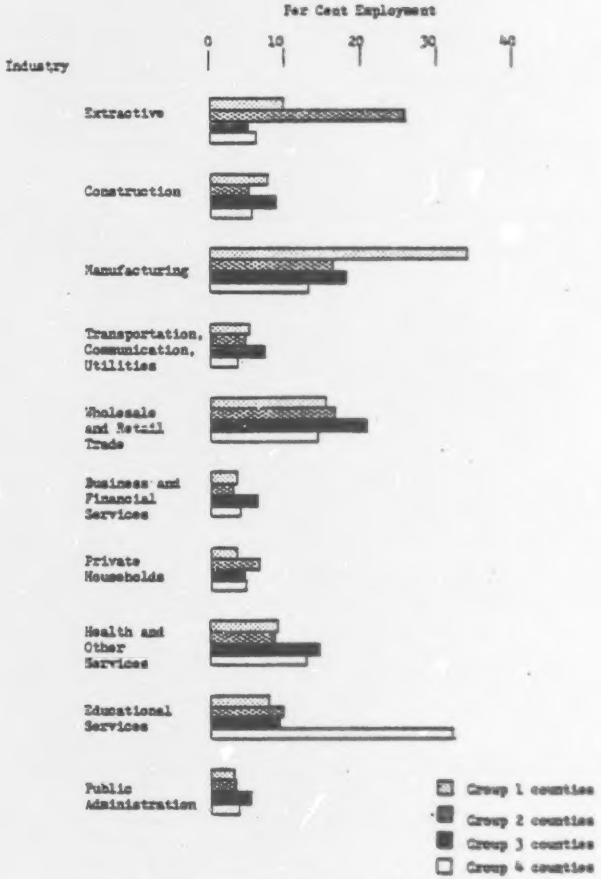


Figure 3. Mean work force distribution of county Groups

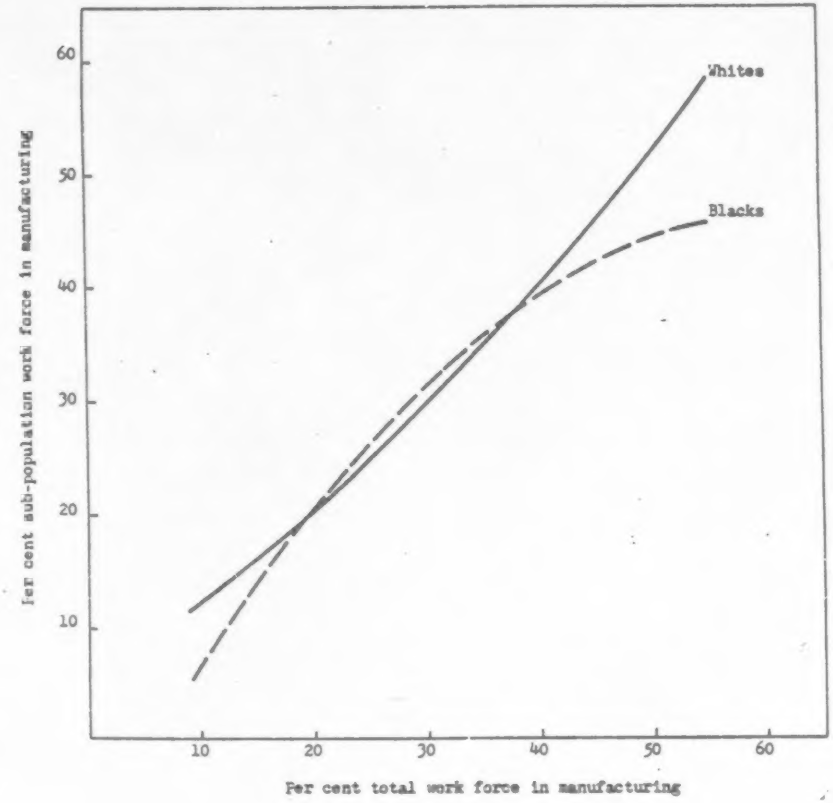


Figure 4. Black and white work force representation in the manufacturing industry for entire state.

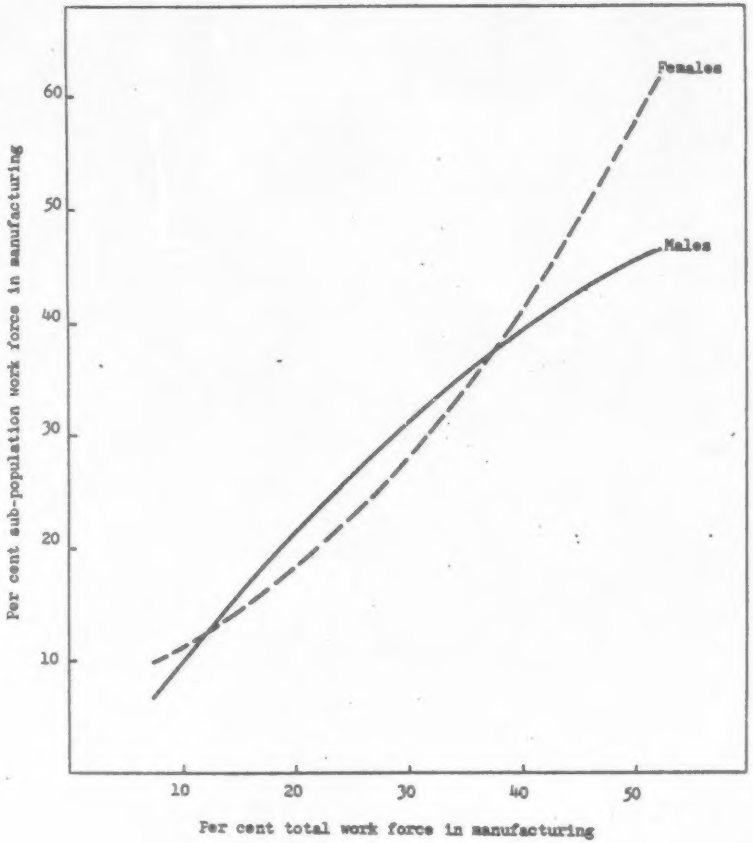


Figure 5. Male and female work force representation in the manufacturing industry for entire state.

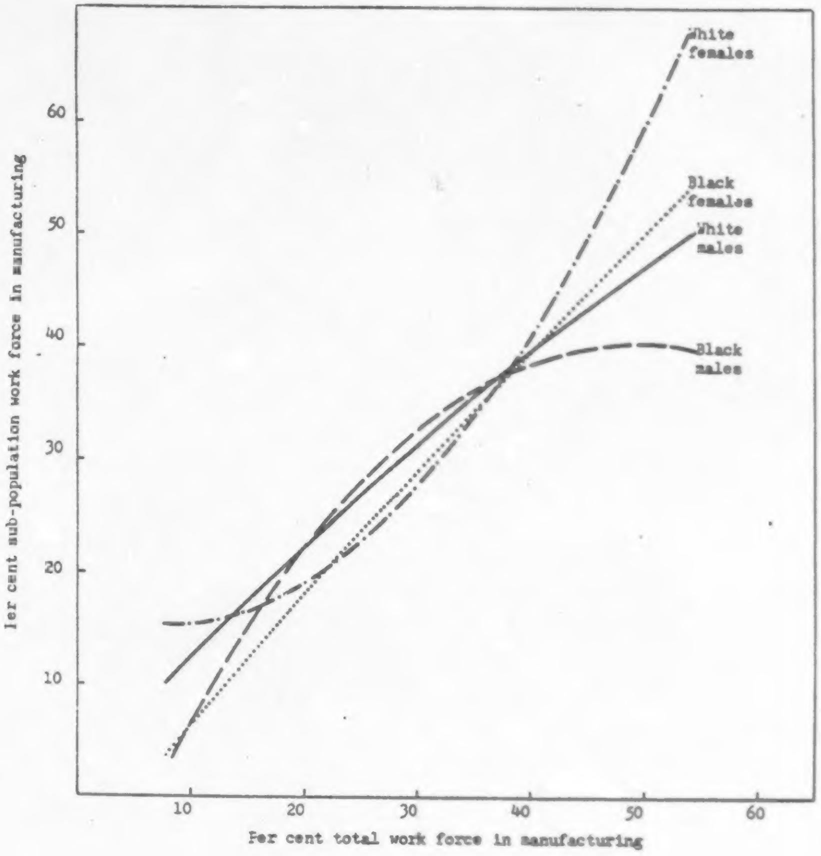


Figure 6. Work force representation by sex and race in the manufacturing industry for entire state.

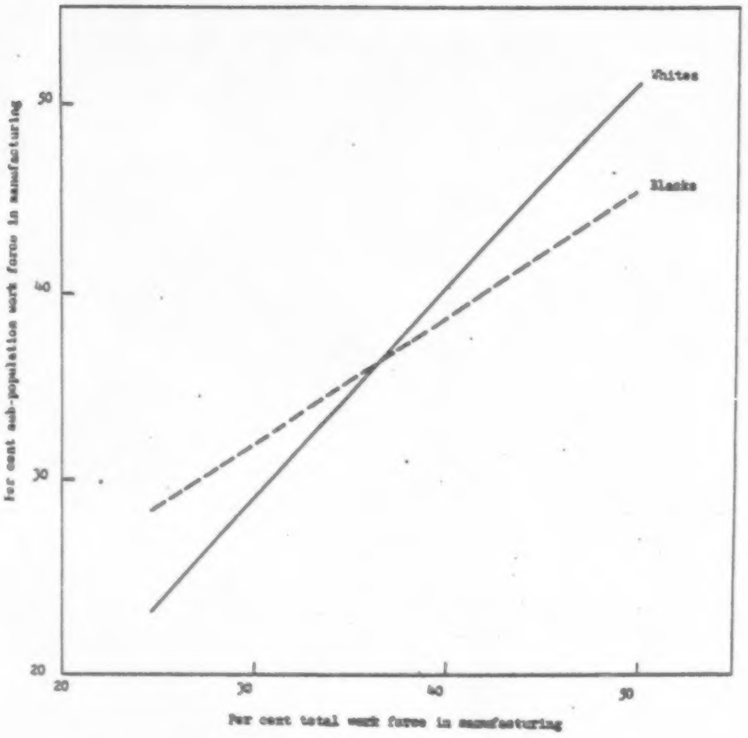


Figure 7. Black and white work force representation in the manufacturing industry for the 57 counties high in manufacturing (Group 1).

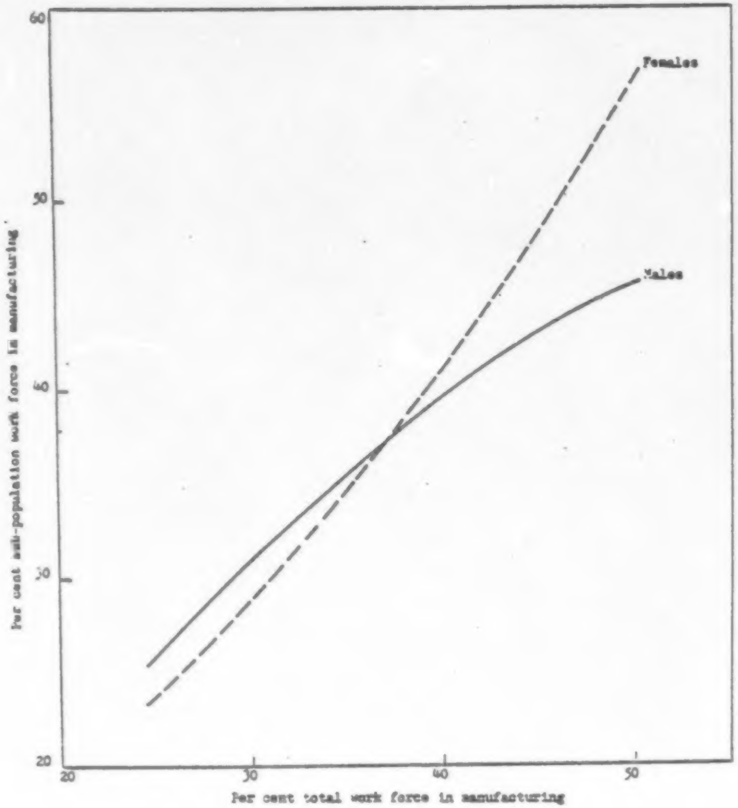


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Figure 8. Male and female work force representation in the manufacturing industry for the 57 counties high in manufacturing (Group 1).

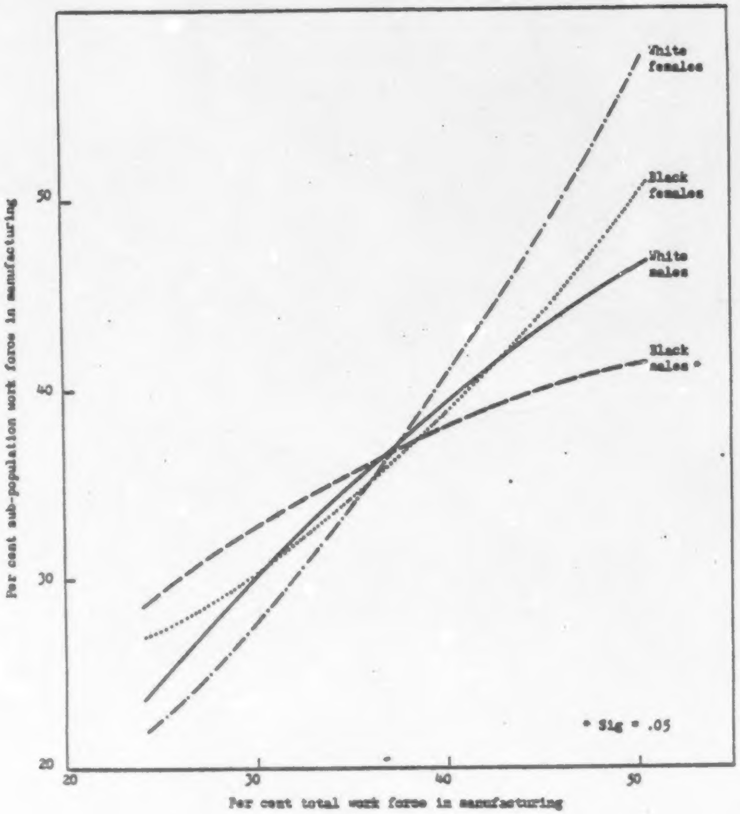

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Figure 9. Work force representation by sex and race in the manufacturing industry for the 57 counties high in manufacturing (Group 1).

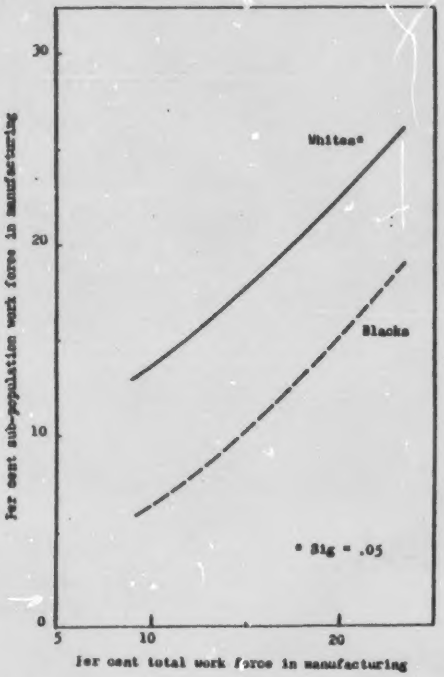

Figure 10a. Black and white representation in 13 agricultural counties (Group 2).

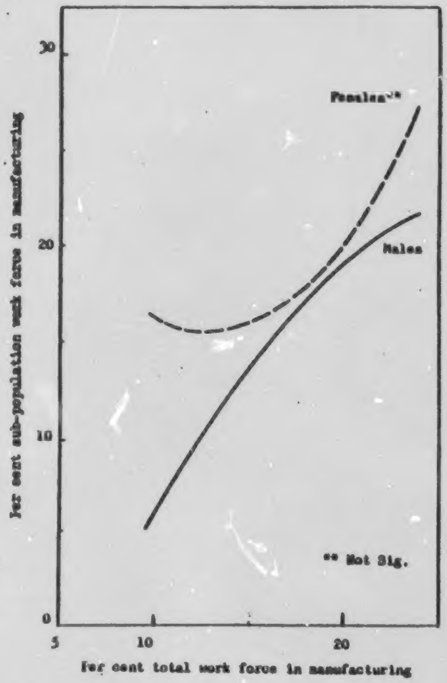

Figure 10b. Male and female representation in 13 agricultural counties (Group 2).

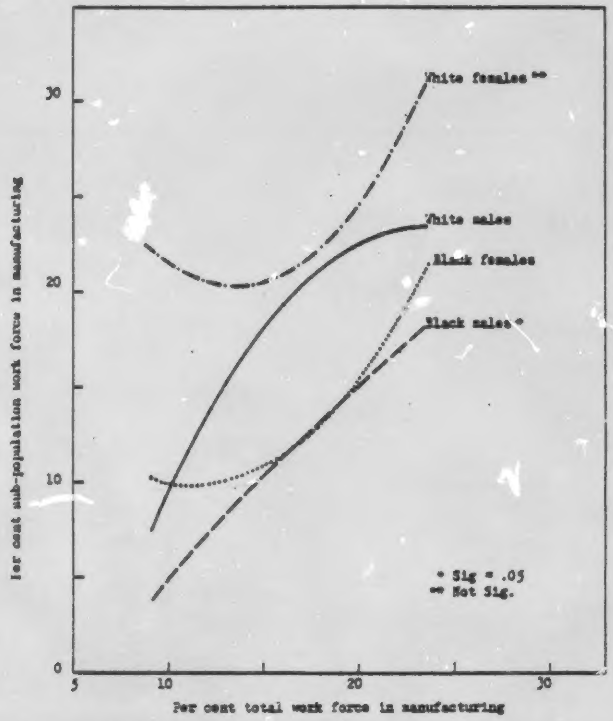

Figure 11. Work force representation by sex and race in the manufacturing industry for 13 agricultural counties (Group 2).

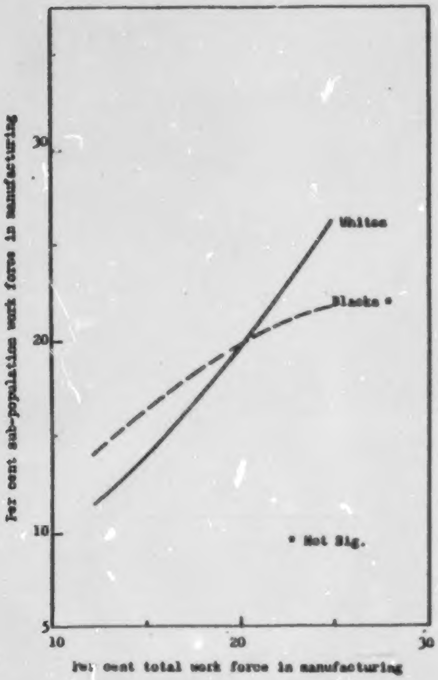

Figure 12a. Black and white representation in 10 urban counties (Group 3).

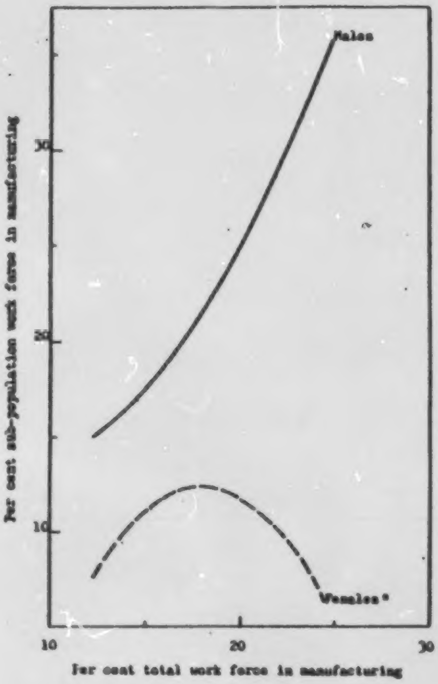

Figure 12b. Male and female representation in 10 urban counties (Group 3).

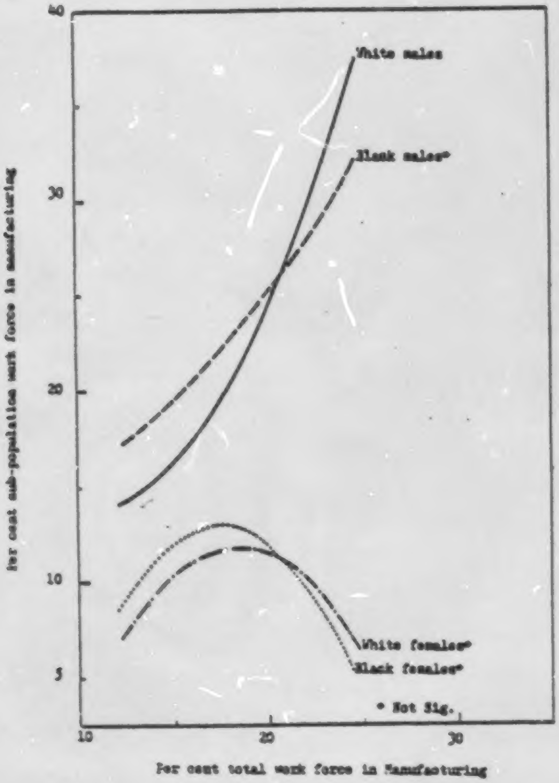

Figure 13. Work force representation by sex and race in the manufacturing industry for the 10 urban counties (Group 3).

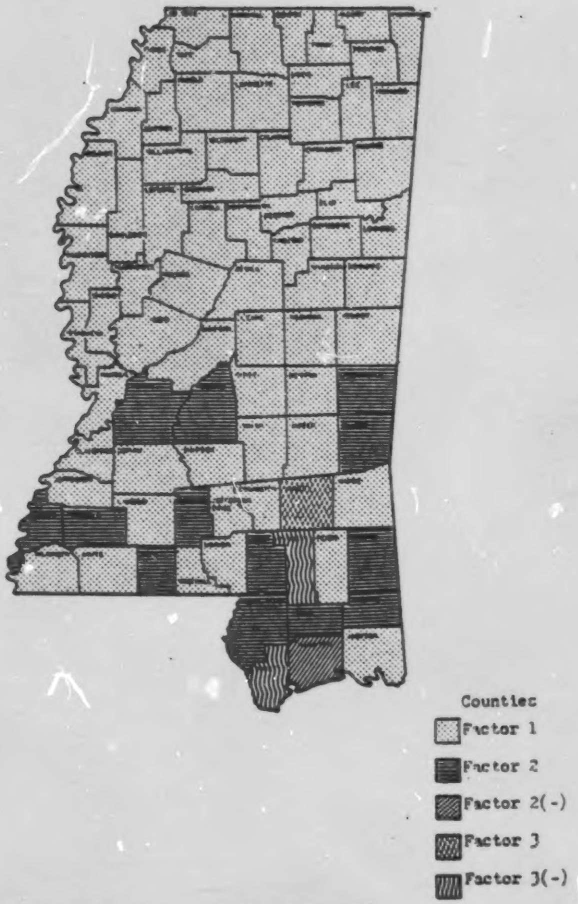
Counties
▨ Factor 1
▨ Factor 2
▨ Factor 2(-)
▨ Factor 3
▨ Factor 3(-)

Figure 14. County groups based on trends in manufacturing employment for 1930-1970.

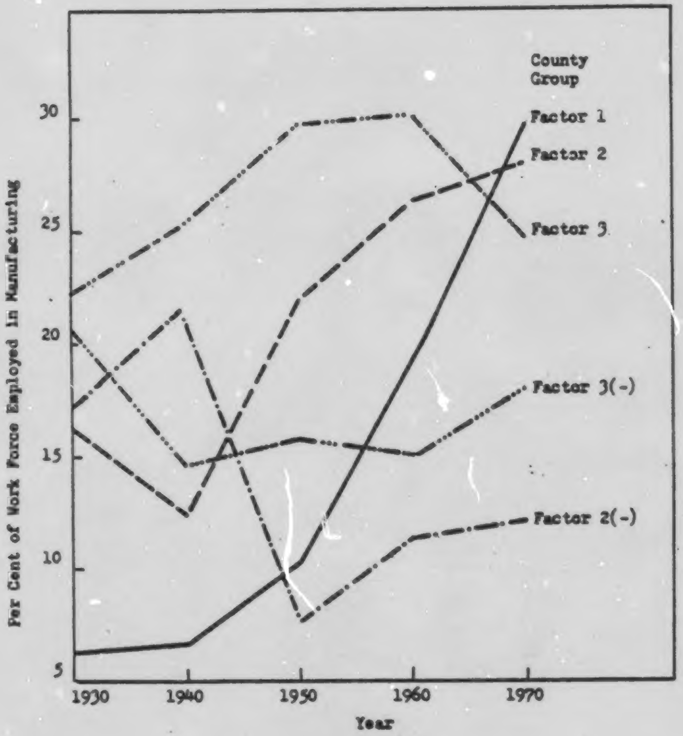

Figure 15. Trends in Manufacturing Employment in Mississippi, 1930-1970

SESSION C

MIGRATION

REPORT ON A COMPARATIVE STUDY OF MINORITY GROUP INTEGRATION: MEXICANS IN TEXAS AND TURKS IN SELECTED GERMAN CITIES, W. G. Roeseler, Texas A&M University.

WAGES AND MIGRATION OF THE SOUTHERN LABOR FORCE: A DUAL PANEL STUDY--1960 AND 1970, Gerald Wheelock, Alabama A&M University; Virginia Caples, Alabama A&M University; Sheng-yung Li, Virginia State College; M. S. Dhaliwal, Alcorn State University; Woong K. Cho, Alcorn State University; and Tex L. Boggs, Kentucky State University.

EXAS A&M UNIVERSITY
DEPARTMENT OF URBAN & REGIONAL PLANNING
LLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN • COLLEGE STATION, TEXAS 77843 • 713-845-1046

REPORT ON A COMPARATIVE STUDY OF MINORITY GROUP INTEGRATION POLICIES: MEXICANS IN TEXAS AND TURKS IN BAVARIA

presented by

Dr. W.G. Roeseler

Professor and Head
Department of Urban & Regional Planning
Texas A&M University

to the

Annual Conference of Southern Association of Agricultural Scientists
Hot Springs, Arkansas
3 - 6 February 1980

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REPORT ON A COMPARATIVE STUDY OF MINORITY GROUP INTEGRATION POLICIES: MEXICANS IN TEXAS AND TURKS IN BAVARIA

Principal Investigator: Dr. W.G. Roeseler, Professor and Head
Department of Urban and Regional Planning
Texas A&M University
College Station, Texas 77843

1. Scope and Objectives

Highly industrialized countries such as Germany and the United States have long been inducement to substantial migration of persons native to less developed Third World Nations. During the last thirty years this immigration pattern has assumed new and extraordinary dimensions as a direct result of unprecedented prosperity in the developed countries. This prosperity to large extent was prompted by worldwide demand for goods and technical services available only in these industrial countries which produced a chronic shortage of labor especially for those tasks which the citizens of the advanced countries would consider to be demeaning. In much the same manner as was so common during the second half of the 19th Century, residents of the poor countries would see in that labor shortage their chance to move into the "lands of opportunity."

Integration into host society during this period in time is altogether different than the typical integration pattern of the 19th Century in Europe and in America. Immigrating minorities often have different status as a group than the migrants of the past and play a different role within the political structure of the host society. A wide range of personal social objectives exists spanning a full spectrum from temporary work experience, productive lifetime experience, intermittent work periods, to full integration with an overriding goal of a "better future" for the migrant's children.

Host societies have learned to cope in different ways with the problems and aspirations of the immigrants and, conversely, the migrants for their part have assumed widely differing roles and postures. Their response too spans a full spectrum of possibilities from patient, if not obedient submission to dramatic, at times, violent demands. The implications of this modern-day "Voelkerwanderung" are enormous. In fact, they may well determine at some point in the not too distant future the fate of major parts of continents and countries presumed to be so well established that their foundations are rarely questioned.

The study examines the impact and conditions of immigration of two nationality groups in two major economic regions of the world: the Mexican immigration into Texas, and the Turkish immigration into major West German centers with a special emphasis on Bavaria. Both subject areas are considered to be representative of America's and Europe's socio-economic patterns and political infrastructures. The paper will give an overview of the project.

Within this context, the regional planner is frequently called upon to analyze and forecast probable conditions and circumstances which are likely to arise as a result of immigration of the test minorities who have a strong group identity and tend to maintain it even beyond the initial first generation immigrant population. The socio-economic role of these groups in relation to the native population and labor force, the political impact, the cultural reciprocity typically flowing from the countless informal and formal interactions between host and guest, the questions of acceptance - when the guest becomes equal or "near equal" citizen, and many other issues are to be investigated.

While considerable literature exists in the form of monographs and within the context of sociological and political science review and analysis, little has been done to focus on parallel trends in comparable societies such as the German and American. Conversely, it is too cumbersome, and perhaps not necessary to attempt a comprehensive all-encompassing analysis of these social issues insofar as the test societies in their entirety are concerned. It will suffice to address representative elements of these national entities, namely Texas and Bavaria. Both regions are known for their aggressive business attitudes and both represent the full spectrum of modern industrial economic conditions: ranging from international commerce and the production of nearly every major manufacturing category to significant agriculture. Both states offer precisely what the immigrant from Mexico and Turkey needs: comparatively high earnings potential, political and economic stability, legal systems which protect the immigrant in much the same manner as the established citizen, an open culture and many other attributes. On the other hand, both have negative aspects flowing from great wealth and prosperity, overzealous nationalism, provincialism, economic exploitation of the ignorant or gullible, etc.

Among other objectives this study intends to examine the principal characteristics of the migration pattern in both regions with respect to these and other phenomena and to compare both societies with one another. Formalistic or legal constraints and government policy will be examined and their effectiveness in both situations will be scruntinized. Particular emphasis will be placed upon public policy and legal response to longer-range and short-term issues perceived as problems and how such perception originates and ultimately manifests itself.

Specifically, the study will address the following issues:

1. The order of magnitude of the two migrations in relation to the host economy and population composition.
2. The economic attractions which bring the foreign population to the host countries.
3. Skills and qualifications of the immigrants compared to demand skills, and public policy in both situations regarding development skills, and public policy in both situations regarding development of adequate skills among the migrants.
4. Social and political orientation of the migrants, their aspirations, preferences and outlook on the new environment.
5. Relationship of new immigrants to established "countrymen".

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6. Public policy in the U.S., and more specifically in Texas - in West Germany and in Bavaria - with respect to cultural integration of the foreign-born migrants in the light of such available infrastructures as the school systems, other public and quasi-public institutions and organizations.
7. The migrant and the courts in civil and criminal disputes.
8. The migrant and political objectives: the formal and actual circumstances.
9. The migrant in national emergencies: "Where do I belong?" including the immigrant in the military.
10. The social base: family order or breakdown?
11. Effects on the sending country: economic pressure relief; drain of quality labor; interaction with "those at home".
12. Return of the migrants: power through acquired wealth; cultural and political impacts.
13. National policy and interaction between host and sending countries: direct influence of the migrant population on international relations.
14. General applicability of findings in study regions upon worldwide measures and United Nations policies.
15. Are worldwide guidelines possible?

The thrust of the research effort outlined herein will be an identification and description of major parallels which are presumed to exist in Texas and in Bavaria with respect to the management of migration in both regions by state and central government agencies. Of primary interest here will be an analysis of prevailing public policy and its implications on the migrant worker and the host society. Public policy as reflected in law and regulation will be compared with discernible actual public attitudes as expressed through the process of administration of such policy on the one hand and through pertinent action by the public at large and its various constituencies. The public in this context will refer to the formally structured public and its various entities both within and outside of government. It will include representative samples of the business, labor, general civic and social sectors of society and will attempt to reach beyond these into the amorphous unorganized public world through which much of human social interaction assumes meaning and substance.

Any examination of impacts of migratory population patterns must be keenly aware of the reverse phenomenon, the effect of such migration upon the country of origin. Not only does the receiving country experience beneficial or adverse impacts from the migrants, the sending country, too, is likely to undergo substantial changes as a result of that modern-day pattern. Here the impacts may be primarily twofold: a relief of economic pressures through reduction in the effective labor force which cannot be utilized at home; and increased social and political pressure from returning migrants whose previous attitude may have changed as a result of prolonged associations and acquired wealth in the host country. The former might be accompanied by negative factors for the society of the sending country as it may well deprive it of those younger and more enterprising individuals which move society in general. The latter may be both positive and negative as it might bring about complex cultural cross fertilization with a wide spectrum of often unpredictable consequences. The reverse of the investigation will therefore look at the sending country to find first, whether or not there is a concern and awareness of the impact; and second, if so, what specific measures or policies are attempted to cope with the issues. The effectiveness of these measures and the extent to which that guide or restrain will further objectives of the study.

2. Observations on Methodology

Regarding methodology, this investigation will not attempt to "reinvent the wheel" as it were by researching the histories of migration in the subject study areas. Considerable literature is available and a data base exists in the United States, Mexico, West Germany and Turkey which is more than adequate for the purpose at hand. There appears to be little dispute with respect to the quantitative base facts in both situations although it is recognized that uncertainty exists wherever illegal activities are concerned. However, even in this sensitive area of inquiry an acceptable consensus range may be found. Moreover, very little is to be discovered with respect to the description of the symptoms, both positive and negative, of the Mexican and Turkish migrations in Texas and Bavaria. Sociological and political science literature, the economic and regional science journals, here and abroad abound with reports of those. We are all aware, I am certain, of the many and fine presentations of issues in housing, public education, civil and political rights, labor, and so on which attempt to address the pros and cons of migrant labor. There is however, remarkable silence with respect to policy and political commitment by the controlling political parties and their loyal opposition, and the actual implementation of such policies in the public and private sectors. Most importantly, no attempt has been made to compare major host countries in this respect in an effort to learn from success and failure. It is considered quite significant to do so as the phenomenon is not only likely to continue in the future, but all indications point to an ever increasing movement on larger and larger scale and in perplexing complexity. We submit that the issues of economic and political success or failure of much of the Third World will be contingent upon the ability of the advanced nations to show the way toward enlightened management of the kind of migration we are attempting to compare in Bavaria and Texas. As we make this analysis we stress again the necessity of not only focussing on the guest countries but on the sending countries as well, for the phenomenon of international migration is no longer perceived as a one-sided immigration issue which was characteristic of the 19th and 20th Centuries.

3. America's Mexican Connection

In this context, allow me to rely primarily on the very fine reports of Dr. Vernon M. Briggs of the University of Texas for the Mexican-Texas relations,[1] and on a recent publication by Dr. Ray C. Rist for the situation of the Turks in West Germany.[2]

Both migrations represent major movements in the world today. Perhaps the most significant difference between the two phenomena lies in the fact that the Mexican migration, as Dr. Briggs points out repeatedly, is "predominantly illegal and unregulated in character" which neither the government of the United States nor the government of Mexico are apparently willing to recognize in all of its implications, let along attempt to manage on an enlightened basis.[3] The Turkish migration on the other hand is well recognized by both the West German and the Turkish governments and is essentially based on the guest workers concept developed through trial and error by the common market countries. Both the American and the German situations have substantial historic backgrounds which cover the full gamut of migrant experience from hope and prosperity to exploitation and persecution over the hundred thirty or fourty years since the industrial revolution in both continents made its first major impacts.

The Treaty of Guadelupe Hidalgo of 1848 and the Gadsden purchase a few years later settled the land disputes between the United States and Mexico by incorporating into the United States the American Southwest, a region approximately the size of present-day India. Carey McWilliams estimates that not more than about 75,000 Mexican nationals were in residence in that area at the time and all were given the option of either becoming U.S. citizens or moving to what is now Mexico.[4] Since most believed the arrangements of the Treaty to represent merely temporary occupation by the United States, Rudolfo Acuna believes that few actually left.[5] Until shortly after the turn of the century, not more than 30,000 Mexicans migrated to the region.

As a result of a "push" force, the violence of the Mexican civil war after 1910 and the "pull" effect of American agricultural development and labor shortages during World War I, Mexican immigration assumed major proportions between 1910 and 1930.[6] This migration may have resulted in an influx of nearly a million Mexicans. Following the depression reversals, mass unemployment caused the United States government to attempt forceful repatriation of Mexicans, a condition further aggrevated by the disasters of the "dust bowl" migrations of whites from Texas and Oklahoma into other agricultural regions. It is believed that a quarter of a million Mexicans were repatriated between 1930 and 1940, many in flagrant violation of their civil rights. World Warr II reversed this trend once more. Shortage of labor caused the United States government to tap the cheap pool of Mexican labor as in the past. However, because of the recent bitter memories of forced repatriation and the discriminatory treatment of Mexicans in the Southwest in general, conditions had substantially changed in Mexico as well. Her economy was flourishing and the Mexican government was in much stronger position to protect the interests of her migratory work force. Eventually a formal agreement was produced in 1942. The Mexican Labor Program, popularly known as the "bracero program" was established. Under this agreement which ended in 1947, the Mexican worker was restricted to farm labor and would be deported if found holding a job in any other industry - a true "bonanza" for the American grower as Briggs correctly observes.[7] In 1951 the program was revived until it was unilaterally cancelled by the United States in 1964. Despite various attempts by individual

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congressmen and the Mexican government, further revivals of the program have been unsuccessful. As a direct result of failure by government to come to terms with the issues, illegal migration of Mexican nationals into the United States has reached unprecedented proportions. While official U.S. Census figures place the order of magnitude at 4 to 6 million, others, including the former Commissioner of Immigration and Naturalization Service, Leonel Castillo, believe the figure to be between 8 and 12 million currently living illegally in the United States. At this writing, the population of the United States is approximately 225 million; that of Texas 14 million; and that of Mexico 50 million.

4. Background of the Turkish Migration - Why Germany?

The Federal Republic of Germany has a population of about 62 million at present, just slightly over one forth of that of the United States. Bavaria's population is about 14 million. Of the 62 million residents of West Germany, some 4 million are of foreign origin, including 27 percent from Turkey. It is estimated that an additional 15 percent of illegal immigrants reside in Germany, an estimate which tends to fluctuate with changing political conditions in East and Southeast Europe. The prominence of Turkish labor in Western Europe in general and in Germany in particular is largely a post World War II phenomenon. Turkey's current population is estimated to be approximately 40 million.

During the 19th Century, Germany attracted immigrants primarily from Eastern Europe, notably Poland. For example, in 1910 nearly half a million mine workers in the industrial Ruhr region were of Polish origin. In addition, much of the agricultural labor in the eastern provinces of Prussia traditionally consisted of Polish people. In times of prosperity numerous inducements existed for these immigrants and in time of economic stagnation discriminatory practices would discourage the foreigners. Demand for manpower in the armed forces prior to and during World War I further increased immigration as military service emerged as a rewarding channel of social ascent and acceptance for the immigrant. Interestingly enough, an estimated 12 to 15 percent of the German Imperial Army's non-commissioned officers' corps around the turn of the century consisted of persons of Polish origin.

Following the revitalization of German industry and accelerated rearmament in the mid and late 1930's, a series of agreements were executed with European countries concerning the status of guest labor in Germany which induced some 7.5 million persons to seek employment there. With the decline of German military power in 1943, these agreements were largely set asisde and expediency prevailed. During that period the labor force which had come voluntarily to Germany under acceptable conditions was supplemented by forced labor inductions in occupied countries, and of course, by prisoners of war. Rist estimates that these groups amounted to some 1.5 million persons. The end of hostilities brought partial repatriation of the guest and forced workers, although political conditions in some of the sending countries had changed to unfriendly situations causing the stranded workers frequently to become

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"displaced persons", a status which made him eligible for substantial benefits under United Nations (DP) resettlement programs.[8]

The conclusion of the turbulent '40's followed a period of consolidation and reconstruction of the war devastated regions of Europe unprecedented in recorded history. The creation of the European Economic Community (EEC) is generally viewed as a benchmark of the new Europe. Among its many and far reaching consequences stands out the inducement of an incredible migration of workers of all types and skills and their families from the traditionally agricultural regions of Europe and Asia Minor to the industrial centers of the continent, notably to the original common market countries and to France and West Germany. A major policy objective of the Treaty of Rome of 1957 by which EEC had come into existence was the gradual political unification of Europe. A key element of implementing this policy was the development of "explicit legal and institutional arrangements designed to encourage intra-European movement of labor" as Rist correcly observes.[9] The initial beneficiaries of the northwest migration were the Italians. However, within a few years Yogoslavia, Turkey and Greece entered the market and began to send millions of persons to the propsperous north. The guest countries, in turn, began to depend more and more upon the migrant labor force in order to sustain their apparently unlimited thirst for human resources, a prerequisite to ever increasing productivity. Concurrently with this new trend, Europe practically ceased to be the major source of migrants to North and South America, Australia and South Africa. Historically, the emigration of politically or racially persecuted individuals from Central Europe between 1938 and 1948 (including postwar resettlement of DP's) may well have been the last waive of migrants from Europe to America, a waive, though, which perhaps had greater intellectual and cultural consequences for the host country than any other in modern history.

Europe began to look at itself once again as a means to an end. EEC and the resulting labor migration policies began to instill a greater hope and anticipation in the minds of the lower classes of the non-industrial countries than the distant traditional countries of emigration in America and the Pacific. Two fundamental conditions had changed. First, the old industrial powers of Europe - victor and vanquished alike - had not only been physically destroyed or so severely damaged that reconstruction would be the only effective response. Second, and more importantly, these powers and power structures had been morally shaken beyond recognition and thereby forced to reassess their very existence, lest they were to vanish altogether. The continental Europe rebuilt itself and organized society with a clear and unrevokable recognition that survival lies in social and political pluralism. With this realization, people began to look at people in a different light than generations of the past had become accustomed to do. The emerging concept of open borders and free commerce within the countries of the European economic community brought with it the parallel concept of free movement of labor at all levels of skill and character.

This is not to say that the fundamental laws of economic supply and demand of labor had suddenly vanished and given way to a utopian society. Not at all. What had occurred, however, was a more realistic and humane

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approach to the problems of economic demands. The arrangements of inducing foreign labor to seek employment in an industrial host country were fairly uniform in Europe when first initiated on large scale in the 1950's. Typically, the host country would send its agents to the sending country where the agent would work through the respective official labor service agency. There would be no private recruiting during the initial period of reconstruction. Job opportunities would be announced publically and applications taken. These would be checked out for undesirable records, health problems, etc. and eventually the worker would be flown, at host government's expense, to the place of work. Housing, health care, transportation, return to home country, family assistance and other social service commitments were all regulated by treaties between host and sending country. The issue of naturalization was rarely touched by the Europeans for the reason that political equality was not a principal objective of either worker or host country. Poliically, that problem would later raise its not always pretty head and call call for attention as it has everywhere else in the world. It began to surface in Germany first in the early '70's with rising unemployment and temporary economic slowdown.

The moment the public became cognizant of a tighter job market, political pressures began to demand curtailment of foreign labor influx, even of repatriation. It never reached the dimensions of the forced Mexican repatriation of the '30's in the United States, but it lead to the recruitment ban of 1973 and to the instituting of a stricter work and residence permit procedure. Considering the fact that all of West Germany with her 65 million people comprises an area roughly the size of the State of Oregon, and that the majority of the presently living persons there had vivid recollection of the plight of some 12 million refugees driven out of the former German provinces annexed by Poland and Russia in 1945, it is easy to see the sensitivity of the entire foreign migrant issue in that country. Nevertheless, it is to the credit of the Federal Republic and the governments of several of her key states to have come to grips with the problem in about as effective and humane a manner as can be expected anywhere.

The governments of the states and the central government resisted the eternal temptation of blanket and sweeping so-called "solutions" and recognized that, in fact, there is no simple answer at all. While the overall statistics may indicate a surplus of labor in this or that industry group or skill, it is obvious that in a particular situation a demand pattern prevails which must be satisfied. Moreover, conditions throughout the country are far from uniform. Certain metropolitan areas are much more sensitive to fluctuations of restrictions than others, notably those of high population density and extreme economic diversity. While our bureaucrats labor under the misconception that the entire United States was created in the image of Washington and must thus be regulated accordingly, the German planners devised well balanced specific concepts for the treatment of foreign labor in the highly congested and dense areas as against those of less complexity. Certain cities, Frankfurt and Berlin, for example, are given statutory authority to deny on their own initiative foreign residency visas or permits if the official census of population shows a percentage of foreign population of 12 percent or more. Other cities must seek federal approval for such measures. Examination of the effect of the residency ban according to Rist shows that the reason for using it is more likely to be economic than social as one might expect at first glance. The overriding imperative is always to preserve jobs for the local people, in this case the Germans, an edict no politician can ignore for long.

In the course of responding to the economic realities of the day, interests of the various participants do not necessarily agree at the outset. Not only are the obvious players involved: the local people, the politicians, the foreign worker, the employer and the public administrators. As reported in an article in "Die Zeit", a key German weekly, on 16 April 1976, the concerns of multi-national corporations or major foreign-owned manufacturers may be different from all others in a given situation. The Ford Motor Company had strongly opposed a settlement ban to be imposed by Cologne in 1975 as it was largely dependent on foreign labor with only one of four employees being German. The city prevailed, however, and it appears that no problems resulted from the measure. While cities are entitled to impose the restriction for reasons of "maintaining community balance", in the Cologne case the principal reason was economic, namely the protection of the jobs for German auto workers.

The Federal Republic strongly encourages repatriation of guest workers. States with substantial numbers of foreigners have repeatedly attempted to press the federal government into taking a more direct approach to the issue. One such proposed measure is the granting of special bonuses to returning workers, as well as other benefits. However, such measures are easier proposed by ambitious politicians than transformed into effective action by responsible administrators, and little more than political smoke has developed to date. Nevertheless, the concerns are very real. Even with imposed restrictions of work and residency permits, the attraction still remains enormous. Nothing speaks louder and clearer here than a look at the per capita national income of some of the countries involved. Varlier and Ilkin report an equivalent amount of annual per capita national income in Turkey for 1975 of $563. This compares with the West German per capita income of $3,800.; with the French of $3,400. and the Italian of $1,900. Considering further that Germany has the lowest inflation rate of the major industrial countries (less than 4% in 1979), it is self-evident that anyone with demand skills would be attracted to that market.[10]

5. All Problems Solved?

For the worker - and the employer as well - the initial effort of meeting legal requirements and of specific job placement represent a major hurdle. However, realistically, life is much more than a legal existence and a job and very swiftly leaves the narrow bounds of neatly organized bureaucracy behind it - in fact one might get the impression that it thumbs its nose at it. The - he or she - worker is a human being who will associate with other human beings and build a particular life peculiar and unique to the individual's own needs and style. That immediately mobilizes a host of other interactions with the most carefully planned programs cannot anticipate with certainty. Officialdom and the community by their very nature are obliged to react to these inevitable chains of events. It is very well and good to decree that the guest worker must some day leave France or Germany or whereever he may be and that the respective govenment will pay him to go back home. However, he now has children. Are they Turks, or Germans or Frenchmen? The full gamut of issues from civil and political rights, to housing to education to social welfare, even military service, and numerous other problems had to be resolved during the guestworker's tenure in the host country. He had to learn that his legal rights are not necessarily his de facto rights in a sometimes prejudiced environment. At other times, the community had to learn that it too cannot pretend that the friend in their midst is by superior law a stranger. And in any event, history has shown us time and again that the mightiest conquest is the peaceful conquest through economic achievement which always is followed by political power.

As I said initially, it is the purpose of this investigation to raise these and other pertinent questions and to continue in this sense the research so ably initiated by many others in American and abroad so that we may be able to compare, evaluate and gain better insights. A full report on our conclusions should be available in about two years.

Notes:

[1] Vernon M. Briggs, Jr., Mexican Migration and the U.S. Labor Market, University of Texas Bureau of Business Research, 1975.

[2] Ray C. Rist, Guest Workers in German: The Prospects of Pluralism, Praeger, New York, 1978.

[3] Briggs, Ibid, p. 31.

[4] Ibid.

[5] Adolfo Acuna, Occupied America, Canfield Press, San Francisco, 1972.

[6] Briggs, Ibid.

[7] Ibid.

[8] Rist, Ibid.

[9] Rist, Ibid.

[10] O. Varlier and S. Ilkin, "The Role of International Migration Within the Turkish Planning Perspective", in "International Conference on Migration Workers", Berlin, 1975, p. 406.

WAGES AND MIGRATION OF THE SOUTHERN LABOR FORCE: A DUAL PANEL STUDY - 1960 AND 1970.*

Gerald Wheelock, Alabama A&M University;
Virginia Caples, Alabama A&M University;
Sheng-yung Li, Virginia State College ;
M. S. Dhaliwal, Alcorn State University; and
Woong K. Cho, Alcorn State University

Abstract

Using the Continuous Work History samples for two panels - 1960 to 1965 and 1970 to 1975 - the wage trends of the South's young adult labor force (age 25-44) are compared by sex, race and migration. This descriptive analysis provides a setting for a regional research project - RR1 entitled "The Isolation of Factors Related to Levels and Patterns of Living in Selected Areas of the Rural South".

Introduction

This paper marks the initial demographic analysis of the regional project entitled "Factors Related to Levels and Patterns of Living in the Rural South" and otherwise known as RR1. This analysis proposes to describe the trends for income inequalities between sex and race categories. Two guiding hypotheses are employed. First, in the context of equal employment opportunity, it is expected that wages for females and blacks are continuing to increase relative to white males. Second, in the context of a disadvantaged economic structure, i.e., relatively lower average wages, it is expected that wages for blacks and females relative to white males, will improve more slowly than in economies with higher average wages. Only the first hypothesis is developed in this paper.

The Equal Employment Hypothesis

Regarding equal employment opportunity, Burstein (1979) has observed that those who deal with the laws tend to see their effects as slow and uncertain (see Bell, 1977:681; Hill, 1977:4) while those who deal with income data tend to see the laws effects as immediate and consequential for black and white male income differences (see Freeman 1973:118-9; Master, 1975:143). Burstein concludes (1979:388) that:

> "although nonwhite men and women have made major gains relative to white men in recent years, and white women show some signs of reversing a downward trend, the income gaps between groups are still very large, the

> gains thus far may have been the easy ones, involving the elimination of especially crude and blatant forms of discrimination. As discrimination becomes more subtle, as structural discrimination becomes a more important part of total discrimination, and as the legal system is confronted more and more often with conflicts between fundamental values - such as non-discrimination and affirmative action - further gains may become more difficult to achieve."

Burstein's analysis compared median incomes of year-round, full-time workers, median wage and salary income of all workers and median total money income by sex and race with white men. The trend analysis did not control for work experience or shifts in labor force participation rates, both of which are more variable among minorities and women.

If minority wage gains observed by Burstein, Freeman, and Masters in the 1960s are to continue, increasingly they must result from structural gains. Experience in the late 1970s with quasi-quota systems and reverse discrimination cases bear testimony to the likelihood that structural gains for minorities in non-traditional labor force categories will be slow. If the economy slows, and demand for labor in these categories subsides, any structural gains will be, due to seniority, the first structural losses.

Several variables could be expected to influence the positive trends of minority and female wages relative to white males during the 1960s and early 1970s. Burstein (1979) includes most of them in his analysis. The list includes the demand for labor or the unemployment rate, increase in education levels relative to white males, attitude toward job access by minorities and women, equal work for equal pay, percent discrimination cases ruled in favor of minorities and women, Equal Employment Opportunity Commission (EEOC) expenditures per minority and female member of the labor force, number of court decisions favoring minority or female complaints, and number of actionable charges based upon race or sex processed annually. The unemployment rate in Burstein's full-time worker model was not a significant influence upon wages of full-time workers. Those laid off are not included in the data set and, therefore, would not depress wages in the sample. However, his analysis of all workers found earnings significantly depressed when unemployment was high.

Emperically, the remaining variables are largely simple functions of time. Attitudes toward minority access to jobs and minority education levels relative to white males have improved side by side since early 1950s. EEO expenditures, court charges, and number of favorable rulings also increase with time. The major difference between these two sets of variables appears to be that the rate of increase in education and favorable attitudes is peaking out while the rate of legal activity has intensified in recent years. This is consistent with the hypothesis that the easy gains have been made and that the structural inequalities will be more difficult to reduce. Aside from its theoretical value, we suspect that the predictive value of Burstein's model at best is only a slight improvement over using time and unemployment rates alone to predict relative improvements in minority wages. At worst, his model does not take into account the competitive nature of the labor force particularly for young blacks and females who are scrambling in increasing numbers for jobs as the baby boom of the 1950s hits the job market. To do this, labor force participation rates,

rates-of-expansion of the labor force, skill levels and work experience, all by sex and race, would have to be taken into account. Until the methodology takes these variables into account the minority wage gains observed by Burstein may simply be the effect of creaming the best from the potentially much larger labor pool. Conversely, the relative losses observed by Burstein for white women is very possibly the result of a large influx of less experienced and relatively less educated into the employed labor force. Burstein acknowledges this flaw in his analysis and cites the following labor force participation rates.

	1959	1964	1975
White females:	33.3%	37.5%	45.4%
Black females:	46.1	48.5	48.7
Black males:	85.2	—	70.3

As suggested, white females are, by virtue of their rapidly increasing participation rate, impacting the labor force with less experienced persons. Also the declining black male and low but stable black female participation rates suggests that more highly skilled blacks are being creamed from the larger potential pool of labor.

In this paper, we will try modest improvements upon Burstein's analysis. We will compare gains by panels of wage earners rather than gains by the employed labor force from one point in time to the next. The within panel comparisons will allow us to hold experience in the labor force as a constant while the between panel comparisons, 1960 with 1970, will allow us to make inferences about the impact of expanding labor force participation rates and competition in the labor force.

The Data

The Continuous Work History Sample (CWHS) used here is a one percent sample of workers earnings records from employers quarterly reports to the SSA. The sample is based on specific digits in workers' social security numbers. To conceal identities the social security numbers are scrambled. Nevertheless, because the same social security numbers are included in the sample for each period, work histories for workers in the sample can be assembled by linking the data files for successive periods. Work histories include data on sex, race, year of birth, and for each time period, the state, county, and industry of employment as well as an estimate of wages earned from each social-security-covered job. (U.S. Dept. of Commerce, 1976).

To estimate the wage gains by sex, race, and region we have constructed panels from the sample, a panel of those employed in both 1960 and 1965 and another panel of those employed in both 1970 and 1975. The sample sizes by race, sex, region, and year are presented in Table 1. A panel of those continuously employed between 1970 through 1975 is also used to estimate the wage difference that can be attributed to continuous employment. These panels provide a basis for comparing the effects of all events and trends of the 1960s with those of the 1970s including equal employment opportunity legislation. The beginning dates for the panels are arbitrary but 1960, 1965, 1970, and 1975 represent uniformly high points in the wage trend lines. Recession years and low points in the wage cycles as represented by Burstein (1979: Figure 1, 375) are avoided by these dates. Therefore, it appears reasonable to assume that wages for these years are little influenced by economic cycles and that they represent longer term trends.

Table 2 presents the two panels beginning and ending average wages for white males by region (South stayers or non-South stayers) or migration status (South inmigrants or South outmigrants) and by age (25-34 and 35-44). Average wages of black males, white females, and black females are represented as a percentage of the white male income. These percentages will be referred to as wage shares.

The within panel wage share gain or loss is computed by subtracting each sex-race panel's original wage share from its terminal wage share. For example, the South stayers, black male panel, age 25-34 earned 54.8 percent of the white male average income of $4,513 in 1960. By 1965 the same panel of black males earned only 54.5 percent of the white male income of $6,170. Therefore, the black male's wage share had declined three-tenths of a percent (54.8-54.5).

Wage share gains between panels are computed for the 1960 to 1970 decade and the 1965 to 1975 decade. The South's black male panel (age 25-34) for 1960 started with a 54.8% wage share while the 1970 panel started with a 68% wage share. The 1970 panel (age 25-34) has gained 13.2 percentage points over the wage share of the comparable 1960 black male panel. Similarly the panels differ by only 11.0 percentage point at their end. Apparently the gains of the second panel are slowing down before they have reached 2/3 of the average income for white males.

Thus computed, within and between wage share gains provide the data to test the equal employment opportunity hypothesis and the regional contextual hypothesis.

Equal Employment Opportunity Impacts

Equal employment opportunities for blacks and females relative to white males have improved with time. Concurrently, a whole bundle of related activities have facilitated employment opportunities. They include improved education levels of blacks, experience and training of blacks, attitudes of the general public toward women and blacks in the labor force, equal employment opportunity legislation, civil rights awareness on the part of the public, court actions, and government expenditures on EEO enforcement have all enhanced the cause. A more basic question is when and by whom wage share gains have actually been made.

If labor force experience is as important to improved wages as it is in qualifying for a job in the first place, continuous employment should be rewarded over discontinuous employment. Thus in contrast with the literature reviewed above, the data analyzed here are panel data.

This allows us to focus on longer term structural rather than cyclical gains. By using panel data we are analyzing a more stable sample than if we observe simple time-series data of the whole labor force. By comparing changes in wage shares within panels our data are not disturbed by the cyclical pattern of hiring, particularly minorities and women, during good times and laying them off during down cycles. Four types of panels are possible for the CWHS data: 1) those employed at two points in time, 2) those continuously employed throughout the multi-year duration of the panel, 3) those fully employed at two points in time, and 4) those both continuously and fully employed for the duration of the panel. A study of the fourth type would eliminate the most cyclical variation, but it would also vastly reduce the sample size. Initially we have chosen the first type of panel which has the largest sample size and allows us to disaggregate without running low on cases in any given panel. In Table 2, among South stayers and non South stayers alike, the trend from the 1960 to the 1970 panel is toward an improved wage share for minorities but not for white females. This result is nearly identical to the Burstein analysis. Burstein's analysis did not observe, however, that the trend for minorities is topping out and their rate of gain is declining while the trend for white females has bottomed between 1970 and 1975. Their wage share is showing signs of improving by 1975.

Within panels in 1960 and 1970 combined, (Table 2) only one-half (24) of the 48 minority and female panels achieved wage share gains relative to their respective white male counterpart. Five of 16 black male patterns including all four South outmigrant panels, made wage share gains. Among white females seven panels - all 35-44 years of age - of 16 made wage share gains. Finally, 12 of the 16 black female panels made relative gains. One might observe that black females are benefiting from being both black and women. Almost certainly, however, the larger number of black female gains is a function of their low starting wage share rather than any double sex-race benefit from EEO. Conversely, the black male gains were limited by their higher starting wage share. Those black male panels making wage share gains are the exception that prove the rule. Their starting wage shares are the smallest among black males. The poor performance on the part of (age 25-34) women within their panels is probably due to their dropping out and re-entering the labor force. This is evident when the same comparisons are made between the panel of employed 1970 and 1975 and the panel of continuously employed 1970 thru 1975 in Table 3. For South or non South stayers, age 25-34, the continuously employed show positive wage share increments over the total sample of employed women for both 1970 and 1960 panels.

Overall, the number of within panel gains for minorities and whites just offset the number of within panel losses. The standoff is further confirmed by the 11 up-trends and the 13 down-trends observed between the 1960 and 1970 panels. One important caveat is that the minority up-trends are topping out while the white female trends are moving up. Only two of eight black male and three of eight black female trends are positive while six of eight white female trends are up.

Finally we must conclude that there is no general improvement observed in the wage shares within these minority or female panels, overtime or in response to EEO.

Virtually all of the wage share gains observed here result from between panel differences rather than within panel differences. Clearly the gains are largely the result of changes in education levels, attitudes, EEO legislation and implementation, and other concommitant events of the 1960's, i.e., improvements in entry level wages for minorities.

All 16 of the 1970 minority panels started and ended higher than their 1960 cohorts. Only three of the eight white female panels started higher, but five ended higher than their 1960 cohorts.

Discussion and Conclusion

We have tried to examine a complicated data set involving 32 panels of labor force data for two seperate time periods 1960-65 and 1970-75 with the intent of extracting results consistent enough to test two general level hypothesis about wage share trends of minorities and females. The 32 panels represent four race-sex categories, two age categories, and four regional stayer-migrant categories.

In the national context we have examined the wage share trends of minorities and females relative to white males. In the context of equal employment opportunity legislation and concurrent increases in minority education and favorable attitudes toward females and minorities in non-traditional occupations, it is expected that wage share trends for these groups have improved and, in spite of the fact that the easy gains have already been realized, will continue to improve. This study differs from the current literature in that panels of wage earners are compared. This makes it possible to control out the effects of changing labor force participation rates and unemployment rates, e.g., expanding in the case of white females and contracting for black males.

We focused upon the modest objective of examining the wage share trends rather than trying to disentangle the cause of the trends, which in turn are largely functions of time. Burstein, in a more ambitious casual analysis, has observed that the minority wage shares have improved with time, but that white female shares have declined. Only recently, he observes their share trends to be bottoming out. Unlike the panel data used here, Burstein's analysis includes no control for labor force participation rates, so his analysis cannot take continuous labor force experience into account.

Our anlysis of the panel data shows as expected that the wage share trends have improved for minorities, but that their gains are slowing down. Meanwhile, in spite of large increases in the labor force, the white female panels show their trends to have bottomed out. In the case of the younger cohort (age 25-34) of white females, the wage share of the 1970-75 panel is gaining relative to the 1960-65 panel. In the older cohorts (age 35-44) of both South and non South stayers, within panel gains were experienced in both 1960 and 1970. In sum, the white female labor force appears to have digested its rapid gains in labor force participation and the associated inexperience without undermining the wage share of the more experienced labor force.

The Southern white female labor force now appears poised to considerably improve its wage share from 48% for the 35-44 cohort and from 55% for the younger cohort (age 25-34). Meanwhile, we observe that Southern minority wage shares appear to be topping out with the younger and older male cohorts centering at about 65% and 57% of the respective white male wages and the black female at about 47% and 40% respectively of the white male wage. A similar pattern with somewhat higher wage shares is observed among non-South stayers.

Burstein did not observe these trends topping out in his time series of the total employed labor force, but he did hypothesize that the easy gains of equal pay within job categories have been made and that the harder structural gains for blacks in non-traditional occupations are yet to be made..

Minority wage share gains have been substantial, but still modest compared with the gains to be made. Our panel data do portray a previously unobserved moderation of minority gains. The difficulty of further gains that Burstein suggest is ahead, may be at hand. Our observation maybe only a short term reality or it may be faulty. While we do not think our observation is faulty we offer the caution that the data represent only two 5-year panels with average wages computed for the beginning and ending year only. Wage cycles do go up and down with economic expansion and recession. However, we have observed the years in question occur at approximately the same upside phases within economic cycles.

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TABLE 1

Sample Size (1 in 100 Social Security covered jobs) sample proportions and changes in sample proportions by race and sex, 1960 and 1970

	1960	1970	60-70
SOUTH (25-34)			
White Male	55.4	54.5	-0.9
Black Male	11.6	9.9	-1.7
White Female	26.5	28.5	+2.0
Black Female	6.5	7.1	+0.6
Sample Size	32,648.0	40,603.0	
NON SOUTH (25-34)			
White Male	66.5	63.6	-2.9
Black Male	5.3	5.5	+0.2
White Female	25.3	27.1	+1.8
Black Female	2.9	3.8	+0.9
Sample Size	89,234.0	101,865.0	
SOUTH (35-44)			
White Male	53.5	49.5	-4.0
Black Male	10.9	9.8	-1.1
White Female	28.9	32.3	+3.4
Black Female	6.7	8.4	+1.7
Sample Size	33,782.0	38,507.0	
NON SOUTH (35-44)			
White Male	62.2	57.6	-4.6
Black Male	4.4	5.1	+0.7
White Female	30.6	33.4	+2.8
Black Female	2.8	3.9	+1.1
Sample Size	94,013.0	90,957.0	

TABLE 2

Changes in Social Security covered wages controlled for age and region of employment by sex and race relative to white males: 1960-65 panel of employees compared with 1970-75 panel of employees.

	1960 Panel			1970 Panel			Panel Differences		
	1960	1965	±	1970	1975	±	60-70	65-75	Trend
SOUTH STAYERS									
Age Cohort 25-34									
White Male	$4513	$6170	0	$7681	$12264	0			
Black Male	54.8	54.5	-0.3	68.0	65.5	-2.5	+13.2	+11.0	-2.2
White Female	57.7	54.8	-2.9	56.7	55.5	-1.2	- 1.0	+ 0.7	+1.7
Black Female	38.1	39.1	+1.0	47.8	47.3	-0.5	+ 9.7	+ 8.2	-1.5
Age Cohort 35-44									
White Male	$5426	$6665	0	$9338	$13788	0			
Black Male	52.1	52.0	-0.1	58.4	56.9	-1.5	+ 6.3	+ 4.9	-1.4
White Female	49.8	51.3	+1.5	47.6	48.7	+1.1	- 2.2	- 2.6	-0.4
Black Female	30.5	32.1	+1.6	38.9	39.6	+0.7	+ 8.4	+ 7.5	-0.9
NONSOUTH STAYERS									
Age Cohort 25-34									
White Male	$5394	$7323		$8887	$13876				
Black Male	71.5	69.1	-2.4	77.6	75.6	-2.0	+ 6.1	+ 6.5	+0.4
White Female	56.2	53.1	-3.1	54.9	54.7	-0.2	- 1.3	+ 1.6	+2.9
Black Female	47.0	45.9	-1.1	54.7	56.2	+1.5	+ 7.7	+10.3	+2.6
Age Cohorts 35-44									
White Male	$6494	$7902		$10889	$15611				
Black Male	66.4	66.7	+0.3	70.1	69.7	-0.4	+ 3.7	+ 3.0	-0.7
White Female	47.4	49.1	+1.7	44.6	47.9	+3.3	- 2.8	- 1.2	+1.6
Black Female	40.7	42.1	+1.4	44.9	48.6	+3.7	+ 4.2	+ 6.5	+2.3

TABLE 2 Cont'd

	1960 Panel			1970 Panel			Panel Differences		
SOUTH IMMIGRANTS	1960	1965	±	1970	1975	±	60-70	65-75	Trend
Age Cohort 25-34									
White Male	$5118	$6914		$8347	$12941				
Black Male	56.0	43.2	-12.8	65.4	52.7	-12.7	+ 9.4	+ 9.5	+0.1
White Female	51.2	47.0	- 4.2	57.1	53.4	- 3.7	+ 5.9	+ 6.4	+0.5
Black Female	37.0	39.4	+ 2.4	45.8	42.0	- 3.8	+ 8.8	+ 2.6	-6.2
Age Cohort 35-44									
White Male	$6638	$7721		$10725	$14406				
Black Male	48.2	41.6	-6.6	59.5	52.3	-7.2	+11.3	+10.7	-0.6
White Female	41.2	40.9	-0.3	42.4	46.1	+3.7	+ 1.2	+ 5.2	+4.0
Black Female	28.6	27.9	-0.7	34.9	35.0	+0.1	+ 6.3	+ 7.1	+0.8
SOUTH OUTMIGRANTS									
Age Cohort 25-34									
White Male	$4751	$7236		$8535	$14402				
Black Male	49.9	56.7	+6.8	61.0	63.3	+2.3	+11.1	+ 6.6	-4.5
White Female	50.5	50.2	-0.3	54.0	52.5	-1.5	+ 3.5	+ 2.3	-1.2
Black Female	33.9	37.7	+3.8	45.7	46.9	+1.2	+11.8	+ 9.2	-2.6
Age Cohort 35-44									
White Male	$6270	$8239		$10930	$16172				
Black Male	44.3	47.5	+3.2	50.0	50.5	+0.5	+ 5.7	+ 3.0	-2.7
White Female	45.9	46.2	+0.3	41.3	42.3	+1.0	- 4.6	- 3.9	+0.7
Black Female	30.0	34.2	+4.2	35.1	36.4	+1.3	+ 5.1	+ 2.2	-2.9

TABLE 3

Changes in Social Security covered wages controlled for age and region of employment by race relative to white
Panel of employed 1970 and 1975 (A) compared with panel of continuously employed 1970 thru 1975 (B).

	A. Employed 1970 and 1975			B. Employed 1970 thru 1975				Increment of B & A	
	1970	1975	±	% of A	1970	1975	±	1970	1975
SOUTH IMMIGRANTS									
Age Cohort 25-34									
White Male	$ 8347	$12941	+155%	74.4	$ 8911	$13966	+157%	107%	108%
Black Male	65.4	52.7	-12.7	61.8	63.8	53.2	-10.6	-1.6	+0.5
White Female	57.1	53.4	- 3.7	51.5	61.6	58.2	- 3.4	+3.5	+4.8
Black Female	45.8	42.0	- 3.8	53.9	46.5	41.6	- 4.9	+0.7	-0.4
Age Cohort 35-44									
White Male	$10725	$14406	+134%	76.9	$11376	$15698	+138%	106%	109%
Black Male	59.5	52.3	-7.2	69.3	58.7	53.0	-5.7	-0.8	+0.7
White Female	42.4	46.2	+3.8	60.9	44.7	49.6	+4.9	+2.3	+3.4
Black Female	34.9	35.0	+0.1	44.3	41.5	38.8	-2.7	+6.6	+3.8
SOUTH OUTMIGRANTS									
Age Cohort 25-34									
White Male	$ 8535	$14402	+169%	78.0	$ 9164	$15327	+167%	107%	106%
Black Male	61.0	63.3	+2.3	73.2	61.6	61.0	-0.6	+0.6	-2.3
White Female	54.0	52.5	-1.5	56.0	55.6	56.2	+0.6	+1.6	+3.7
Black Female	45.7	56.9	+1.2	58.9	47.3	48.9	+1.6	+1.6	+2.0
Age Cohort 35-44									
White Male	$10930	$16172	143%	81.3	$11318	$17000	+150%	+104%	+105%
Black Male	50.0	50.5	+0.5	67.6	56.1	50.2	-5.9	+6.1	-0.3
White Female	41.3	42.3	+1.0	65.5	44.0	45.9	+1.9	+2.7	+3.6
Black Female	35.1	36.4	+1.3	56.7	34.9	38.5	+3.6	-0.2	+2.1
SOUTH STAYERS									
Age Cohort 25-34									
White Male	$ 7681	$12264	+160%	84.9	$ 7921	$12693	+160%	103%	103%
Black Male	68.0	65.5	-2.5	81.6	68.9	66.6	-2.3	+0.9	+1.1
White Female	56.7	55.5	-1.2	69.8	59.2	58.7	-0.5	+2.5	+3.2
Black Female	47.8	47.3	-0.5	70.1	49.8	49.1	-0.7	+2.0	+1.8
Age Cohort 35-44									
White Male	$ 9338	$13788	+148%	87.8	$ 9587	$14232	+148%	103%	103%
Black Male	58.4	56.9	-1.5	83.6	59.9	58.6	-1.3	+1.5	+1.7
White Female	47.6	48.7	+1.1	80.6	48.8	50.1	+1.3	+1.2	+1.4
Black Female	38.9	39.6	+0.7	78.6	40.2	40.4	+0.2	+1.3	+0.8
NONSOUTH STAYERS									
Age Cohort 25-34									
White Male	$ 8887	$13876	+156%	84.4	$ 9205	$14444	+157%	103%	104%
Black Male	77.6	75.6	-2.0	77.8	79.9	78.2	-1.7	+2.3	+2.6
White Female	54.9	54.7	0.2	68.6	57.9	58.8	+0.9	+2.0	+4.1
Black Female	54.7	56.2	+1.5	67.0	57.2	58.4	+1.2	+2.5	+2.2
Age Cohort 35-44									
White Male	$10899	$15611	+143%	88.0	$11130	$16083	+145%	102%	103%
Black Male	70.1	69.7	-0.4	82.8	71.7	71.2	-0.5	+1.6	+1.5
White Female	44.6	47.9	+3.3	79.1	46.2	49.6	+3.4	+1.6	+1.7
Black Female	44.9	48.6	+3.7	77.2	46.7	50.6	+3.9	+1.8	+2.0

SESSION D

HEALTH AND ALCOHOL

COUNTRY-TOWN DIFFERENCES IN HEALTH CARE MANAGEMENT AND ALCOHOLISM TREATMENT IN A MISSISSIPPI CATCHMENT AREA, Mary E. Benjamin, Rommel Benjamin and Frances Bright, Jackson State University.

RURAL HEALTH AND ILLNESS BEHAVIOR: A COMPARATIVE STUDY OF RURAL APPALACHIAN AND RURAL NON-APPALACHIAN RESIDENTS IN OHIO, Helena R. Lupidi, North Carolina Agricultural and Technical State University.

MANAGEMENT OF HEALTH AND ALCOHOLISM TREATMENT BY TOWN AND COUNTRY RESIDENTS IN A RURAL CATCHMENT AREA*

By: Mary E. Benjamin
Professor of Sociology
Jackson State University
Jackson, Mississippi 39217

Rommel Benjamin
Professor of Sociology
Jackson State University
Jackson, Mississippi 39217

Frances Bright
Research Assistant
Jackson State University
Jackson, Mississippi 39217

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MANAGEMENT OF HEALTH AND ALCOHOLISM TREATMENT BY TOWN AND COUNTRY RESIDENTS IN A RURAL CATCHMENT AREA

America has experienced great strides in the medical area over the past twenty-five years. An immunization against polio, the widespread use of dialyses, the brain scanner, etc., are examples of these advancements. The mental health field too has recorded notable advancement. Since the passage of the Comprehensive Mental Health Center Act in 1963, Community Mental Health Centers have been established bringing these services in closer physical and economic range of the masses. Alcoholism services are included in comprehensive mental health services and received a boost with the passage of the Hughes Act in 1970. Today in Mississippi there are fifteen alcoholism treatment programs located in mental health centers, thirteen half-way houses, twenty-one free standing clinics, treatment programs at the East Mississippi and Whitfield State Hospitals, and three specified population programs, Parchman Penitentiary, The Choctaw Indians Programs, and a low-income walk-in program in Jackson, Mississippi. In the Region Five Catchment Area, the target area for this study, alcoholism services are available through the Delta Community Mental Health Services at the Center in Greenville and at three satellite centers, one of which is a residential treatment center.

The services listed above demostrate progress in developing specialized alcoholism treatment services. However, utilization of these services may not be equally spread across the general population. Due to the general pattern of underservice in medical and health care to the rural population, this study is designed to gain insight into the utilization of alcoholism treatment services by country residents and to determine if there are significant differences in the pattern of utilization of these services by country and town residents in a rural catchment area. Comparison of country and town residents will be made on: views of alcohol: use of alcohol; utilization of alcoholism facilities; accessing health care agencies; and perceived barriers to health care. Controls are run on race, income, and sex. Five(5) general hypotheses are tested using Chi-Square.

1. Town and country residents in a rural catchment area do not differ significantly in use of alcohol.
2. Town and country residents in a rural catchment area do not differ significantly on views on alcohol use.
3. Town and country residents in a rural catchment area do not differ significantly in identification of alcoholism resources that would be used for treatment.
4. Town and country residents in a rural catchment area do not differ significantly in accessing health care resources.
5. Town and country residents in a rural catchment area do not differ significantly in perceived barriers to health care.

Definitions of Concepts

I. Views on Alcohol:

Agreeing or disagreeing that alcohol use is sinful or an illness.

2. Use of Alcohol:
   Answering yes or no to question "Do you presently drink alcohol?"
3. Alcoholism Treatment Resources:
   An agency receiving special funds to offer alcoholism services; listed in community and telephone directories as an alcoholism treatment facility; and having a specialized staff to offer alcoholism services.
4. Health Care Resources:
   An agency designed to provide primary or secondary health care, i.e. doctor's office, clinic or hospital.
5. Access to Health Care Resources:
   Inside/Outside catchment area; time spent getting to the health care resources; cost; transportation and no doctors are perceived as hampering access to health care.

The Sample:

All households in the Region Five (Mississippi) Catchment Area were the universe. A multi-stage cluster sample was selected for both the "most densely"populated (town) and the other or "country" area.

For the town sample, (N=100) an Enumeration District Map was used. There were sixty-two (62) districts. All districts were numbered and twenty were pulled randomly for inclusion in the sample. For the twenty districts, streets in each district were numbered with one street pulled to be sampled. Five households, per street, were included in the sample. On each street in the sample, houses on the left and right were chosen alternately. Through this procedure 100 households were selected for the town sample.

For the "other area," country (N=100) the sample was selected by use of Mississippi Geological Maps. Twenty-five households per county using an average of five households per quadrangle are included in the sample.

Related Literature:

The reviewed studies are referenced in the bibliography.[1]

The literature reviewed documents rural-urban differences in alcohol consumption; utilization of health and alcoholism treatment facilities; resources to provide treatment services; resources to purchase health services; life chances and level of living. In general, the rural population had lower chances of accessing health care services. Variables also strongly associated with these factors are race, education and income level.

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[1] Because of space limitations details of the literature received are not included but can be obtained by written request to the authors.

Findings

Data in this section are presented for country and town residents. The sample was predominantly female (62%), and Black (75%). For the town sample, about one-half (50%) were married. Based on U.S. Census Data 1970, the catchment area under study is predominantly Black and women are in a slight majority. (See Table ONE)

Table One . . . Residence by Sex, Race and Marital Status

	Country		Town	
	No.	%	No.	%
MALE	36	40	38	37
FEMALE	54	60	65	63
BLACKS	71	77	76	73
WHITES	19	21	25	24
OTHERS	2	2	3	3
SINGLE	24	26	34	33
MARRIED	50	54	49	47
SEPARATED/ DIVORCED	9	10	10	10
WIDOWED	9	10	10	10

Table Two . . . . Alcohol Use by Residence, for Race, Sex, and Income

	Country		Town		
	No.	%	No.	%	X^2
TOTAL SAMPLE					
Yes	31	35	47	45	10.01
No	54	65	57	55	
MEN					
Yes	18	55	26	68	3.67
No	15	45	12	32	
WOMEN					
Yes	12	24	21	32	7.10
No	37	76	44	68	
BLACKS					
Yes	23	37	26	34	8.06
No	40	63	50	66	
WHITES					
Yes	7	37	19	76	5.32
No	12	63	6	24	
< $5,000 INCOME					
Yes	26	35	38	48	9.64
No	48	65	42	52	
$5,000 > INCOME					
Yes	4	40	9	38	0.0
No	6	60	15	62	

Town-Country Differences in Use of Alcohol

There was a significant difference in the country and town samples present use of alcohol (See Table TWO). The majority of both samples (64%, country; 55% town) stated they did not presently use alcohol; however, this represents about two-thirds of the country compared to just over one-half of the town sample.

When the control variables, sex, race, and income were introduced the majority of males (town and country) indicated use of alcohol while most women (town and country) indicated non-use of alcohol. There was no significant difference in use of alcohol by residence for the Blacks with the majority of country and town residents indicating non-use. While the majority of town and country residents with less than $5,000 income reported non-use of alcohol, there was a significant difference on the basis of residence in the sample.

Hypothesis One: "Town and country residents in a rural catchment area do not differ significantly in use of alcohol" was upheld for the general population, for women, Blacks and persons with less than $5,000 income. While the majority of country and town residents answered in a similiar pattern of non-use, the significant difference is attributed to the size of the majority with country residents having the larger majority of non-users of alcohol.

Views on Alcohol Use

Alcohol use as a physical illness and as a sin was studied. The country and town residents showed no significant difference on viewing alcohol use as a physical illness. The majority of the country residents (71%) compared to three-fourth (75%) of the town residents saw alcohol use as a physical illness. No significant difference was found on views of alcohol as a physical illness for the partials with the majority of males, females, Blacks (67% or more); Whites and persons above and below the $5,000 income level indicating that alcohol use was a physical illness (See Table THREE).

There was no significant difference in town and country residents on viewing alcohol use as a sin with the population being about evenly split in agreeing or disagreeing with the view; however the percentage of whites who viewed alcohol use as sinful was considerably lower especially for town white residents, than for any other partials. (See Table FOUR). Hypothesis Two: "Town and country residents do not differ significantly on views on alcohol" was upheld.

Identification of Alcoholism Treatment Resources

Town and country residents answered similarly when asked to list the place where people can get help for an alcoholism problem. For the country sample, the largest percent (48%) said, "Don't Know. Town residents showed about forty percent (38%) in this category. The largest percent of the town residents (47%) listed the Delta Community Mental Health Services as the facility where alcoholism

Table THREE . . . . Alcohol Use as a Physical Illness by Residence by Sex, Race and Income

	Country		Town		
	No.	%	No.	%	X^2
TOTAL SAMPLE					
Yes	60	71	72	75	0.29
No	24	29	24	25	
MEN					
Yes	25	71	24	67	0.03
No	10	29	12	33	
WOMEN					
Yes	34	72	47	80	0.42
No	13	28	12	20	
BLACKS					
Yes	47	73	50	71	0.43
No	17	27	20	29	
WHITES					
Yes	13	68	20	87	2.05
No	6	32	3	13	
< $5,000 INCOME					
Yes	52	70	53	71	0.02
No	22	30	21	29	
$5,000 > INCOME					
Yes	8	80	19	86	0.61
No	2	20	3	14	

Table FOUR . . . . Alcohol Use as a Sin by Residence, for Race, Sex and Income

	Country		Town		
	No.	%	No.	%	X^2
TOTAL SAMPLE					
Yes	41	45	48	46	0.79
No	41	44	49	47	
Don't Know	10	11	7	7	
MEN					
Yes	16	49	19	51	0.00
No	17	51	18	49	
WOMEN					
Yes	24	51	28	48	.86
No	23	49	31	52	
BLACKS					
Yes	33	53	42	59	.26
No	29	47	29	41	
WHITES					
Yes	7	37	4	17	2.03
No	12	63	19	83	
< $5,000 INCOME					
Yes	36	50	34	47	0.16
No	36	50	39	53	
$5,000 > INCOME					
Yes	5	50	14	58	0.21
No	5	50	10	42	

*"Sometimes Category" Country = 1; Town = 2 - Sometimes + Yes Collapsed in Table for general population and partials.

services could be obtained. The two samples were not statistically different on ability to identify an alcoholism treatment facility. (See Table FIVE).

Hypothesis Three: "Town and country residents in a rural catchment area do not differ significantly in identification of alcoholism resources that would be used for treatment" was upheld.

Table FIVE . . Identification of Alcoholism Treatment Resources by Residence, Race, Sex and Income

	Country		Town	
Total Sample [2]	No.	%	No.	%
A.A.	4	4	9	9
Medical Services	5	6	6	6
Community Mental Health Services	38	42	47	47
Don't Know	43	48	38	38
Total	90	100	100	100

$X^2 = 2.8$

Access to Health Care Resources

Significant differences were found in the town and country samples on access to health care resources. Country residents showed a higher percentage (52%) obtaining treatment for routine health care outside the catchment area. Nine (9%) percent of the town residents reported outside catchment area facilities. On time spent to obtain medical care for an appendectomy, major surgery or a routine medical check-up, the country and town samples also showed significant differences with more time being spent by the country sample. (See Tables SIX and SEVEN).

Hypothesis Four: "Town and country residents did not differ significantly on access to health care" was rejected.

Perceived Barriers to Health Care

Cost as a difficulty in obtaining health care was assessed. The country and town sample showed significant differences with the country residents having a higher (69%) percentage compared to the town sample (37%) listing cost as a barrier (See Table EIGHT). The relationship held for all partials. The white town residents had the highest percentage (96%) saying that cost was not a problem.

Transportation as a difficulty showed significant town country differences. Country residents perceived transportation as a barrier more frequently (43%) than town residents (25%). When the partials were introduced, town and country Black residents were not significantly different with about one-third of the town (32%) and under one - half (46%) of the country Black residents seeing this as a barrier. For whites, the majority of the country (69%) and all of the town residence did not see transportation as a problem.

Lack of a doctor was perceived as a barrier by a significantly higher percentage of country (51%) than town (18%) residents. This pattern held when sex, race, and income were introduced as controls. (See Table TEN).

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[2] One answered "Other".

Table 6 . . . Catchment Area Location of Health Care Facility That Would Be Used for Medical Care, by Residence

Catchment Area Location of Facility That Would Be Used	Appendectomy				Major Surgery				Routine Medical Care			
	Country		Town		Country		Town		Country		Town	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Inside Catchment Area	38	42	97	94	36	40	93	91	43	48	93	91
Outside Catchment Area	53	58	6	6	55	60	9	9	47	52	9	9
Total	91	100	103	100	101	100	102	100	90	100	102	100

$X^2 = 60.27$ $X^2 = 55.50$ $X^2 = 41.51$

Table 7 . . . Time to Reach Medical Facility That Respondents Would Use for Select Medical Care, by Residence

Response	Appendectomy				Major Surgery				Routine Medical Care			
	Country		Town		Country		Town		Country		Town	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 15	17	18.5	63	60.0	13	14.1	62	59.6	15	16.3	57	54.8
16 - 30	32	34.8	31	29.8	31	33.7	31	29.8	40	43.5	35	33.7
31 - 60	37	40.2	6	5.8	43	46.7	7	6.7	32	34.8	8	7.7
61 and Over	6	6.5	4	3.8	5	5.4	4	3.8	5	5.4	4	3.8
Total	92	100.0	104	100.0	92	100.0	100	100.0	92	100.0	104	100.0

$X^2 = 53.82$ $X^2 = 63.26$ $X^2 = 42.11$

Table EIGHT . . . Cost As A Barrier To Health Care by Residence, Sex, Race and Income

	Country		Town		X^2
	No.	%	No.	%	
TOTAL SAMPLE					
Yes	62	69	35	37	23.42
No	28	31	68	73	
MEN					
Yes	22	63	13	35	4.48
No	13	37	24	65	
WOMEN					
Yes	39	74	21	32	18.29
No	14	26	44	68	
BLACKS					
Yes	48	67	33	44	7.30
No	23	33	42	56	
WHITES					
Yes	12	71	1	4	17.99
No	5	29	24	96	
< $5,000 INCOME					
Yes	57	70	29	37	16.90
No	24	30	50	63	
$5,000 > INCOME					
Yes	5	55	6	25	2.75
No	4	45	18	75	

Table NINE . . . Transportation As A Barrier To Health Ly Residence, Sex and Income

	Country		Town		X^2
	No.	%	No.	%	
TOTAL SAMPLE					
Yes	38	43	25	25	7.44
No	50	57	77	75	
MEN					
Yes	14	41	7	19	3.21
No	20	59	30	81	
WOMEN					
Yes	24	46	18	28	3.29
No	28	54	46	72	
BLACKS					
Yes	32	46	24	32	2.14
No	38	54	50	68	
WHITES					
Yes	5	31	0	0	6.22
No	11	69	25	100	
< $5,000 INCOME					
Yes	21	40	10	33	0.16
No	31	60	20	67	
$5,000 > INCOME					
Yes	11	55	8	32	1.56
No	9	45	17	68	

Table Ten . . Lack of a Doctor as a Barrier to Health Care, by Residence Sex, Race and Income

	Country		Town		
	No.	%	No.	%	X^2
TOTAL SAMPLE					
Yes	46	51	19	18	22.98
No	44	49	84	82	
MEN					
Yes	18	51	7	19	7.01
No	17	49	30	81	
WOMEN					
Yes	27	51	12	18	12.49
No	26	49	53	82	
BLACKS					
Yes	38	54	18	24	12.76
No	32	46	57	76	
WHITES					
Yes	7	39	0		11.80
No	11	61	25	100	
<$5,000 INCOME					
Yes	40	50	15	19	15.55
No	40	50	64	81	
$5,000> INCOME					
Yes	6	60	4	17	6.58
No	4	40	20	83	

Hypothesis Five:"Town and country residents in a rural catchment area do not differ significantly in perceived barriers to health care" was rejected.

Summary of Findings

When testing the country and town residents on the five hypotheses in this study significant differences were found on three of the hypotheses: use of alcohol, access to health care and barriers to health care. The country residents reported more abstainers, less access to health care in terms of proximity and intra-catchment location; and more barriers as measured by cost, transportation and lack of a doctor. Country and town residents did not differ statistically on views of alcohol use (as sinful or as an illness) and in ability to identify an alcoholism treatment facility. Most of both samples viewed alcohol use as an illness; with half seeing it as a sin; and while a high percentage of both samples had no knowledge of where to get alcoholism treatment, the facility mentioned most frequently by both was the Delta Community Mental Health Services.

Implications

The findings of this study substantiate the concept of intra - rural area heterogeneity. Within an area (such as a catchment area)that bears the master label rural, there are significant differences in town and country residents. These differences frequently are on variables that directly impact life chances, e.g. access to health care; transportation and financial disadvantages. Commonalities for residents in the rural catchment area must also be systematically studied with both the commonalities and differences considered when designing intervention, prevention, treatment and educational programs, especially in the mental health and health field. In this study, town country differences showed at times in the degree of a similiar response direction rather than with opposing responses. For example, the majority of town and country residents were abstainers; however, the size of that majority was much larger for the country sample. Such could be expected for a population that fits the "folk" rather than the "urban" model. The contribution is in finding the areas of variation from the ideal types in sub-groups within the rural population. When that sub-group is residence, town vs. country, in the master group "rural catchment area", the need for the refinement of the concept rural is accentuated and the need to avoid equating rural and country becomes again evident.

At the practical end of the study, the findings on low knowledge of alcoholism treatment resources could indicate a need for more outreach efforts to both country and town residents. Also, views on the treatability of alcoholism might need assessing. Not being able to identify an agency where a person could be helped with an alcoholism problem might mean that the respondent does not feel that a person with such a problem can be helped.

The similarity of the country and town residents in seeing alcohol use as a physical illness and with about half of the samples not seeing it as a sin could be an asset in inducing people to treatment and to get significant others in their life into treatment. Decreasing prevalence of the "sin" label conceivably means a reduction in guilt as a major barrier to utilization of alcoholism treatment.

The differences in town and country residents on actual access (time, and catchment area location) and on perceived barriers to health care (cost, transportation, or doctor) lend support to the basic issue addressed in this study--the underservice of the country population. Existing studies validate rural underservice and this study substantiates more specifically underservice to the country population within a rural catchment area.

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SELECTED COMPONENTS OF RURAL HEALTH AND ILLNESS BEHAVIOR: A COMPARATIVE STUDY OF RURAL APPALACHIANS AND RURAL NON-APPALACHIAN RESIDENTS OF OHIO

BY

Helena R. Lupidi

Assistant Professor of Rural Sociology and Research Associate in Rural Development at North Carolina Agricultural and Technical State University. Funding for the data collection of this research was provided by the Ohio Agricultural and Research Development Center and the Ohio Cooperative Extension Service. This study is part of a larger rural health project.

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ABSTRACT

The purpose of this paper is to report the findings of a study designed to examine the relationship of some potential health attitudinal and behavioral differences between rural Appalachians and rural non-Appalachians within a selected ten county area of Ohio. This study is intended as expansion of previous research efforts associated with local health status factors by collecting and evaluating similar data on rural health practices (Phillips, 1975).

Two different samples were utilized for the present research. The first sample consisted of a systematic random sample of the study area residents obtained in 1977. The second supplementary sample, obtained at the same time was composed of additional health status information specific to this study. The independent variable for the study was termed residential area. The independent variable consisted of rural Appalachians and rural non-Appalachians who live in Ohio. The independent variables for the study included health behavior, illness behavior, morbidity, sex, and patterns of physician interaction. These data combined with selected health status characteristics of the respondent and spouse are the primary focus of this report.

INTRODUCTION TO THE PROBLEM

Rural-Health

Health care needs are commonly considered to be greater in rural areas than in cities. The literature gives a variety of reasons for this difference in rural-urban health status. One point of view suggests rural people do not have the same opportunities for health care as do urbanites. A report published by the United States Department of Agriculture states that:

> Generally speaking in rural areas, the physician service is more acute; persons must travel longer distances to obtain health care; emergency health services are more deficient; work-related injury rates are higher; and a comprehensive approach to health care delivery often is not present (USDA, 1974:1).

Rural Appalachian Health

Appalachia is a land of great natural wealth. Yet despite its wealth, the most predominant group in Appalachia is the one that has never really been out of the low income category; whether income, health, educational attainment, or housing are the criteria used for assessment (Lewis and Knipe, 1971).

Some studies have emphasized the role of cultural, ethnic, and social class differences in health and illness behavior. For the most part, these studies (Bolaria, 1971; Koos, 1954; Parsons, 1951) view health and illness behavior as a socially learned response. Thus, the factors of social class, cultural values, ethnicity and medical orientations are seen as playing an important part in differential patterns of health and illness behavior.

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These are vital contributions, but additional information is needed as to how the health and illness behavior of sub-groups vary. Research findings explaining these differences would be extremely valuable for health planners. Moreover, such information could potentially shed light on the existence of any sub-group differences. More specifically:

1. The physical health status of rural people can serve as a bench mark for future comparative purposes as well as providing an understanding of the current situation in a variety of situations.

2. Variations in physical health, health knowledge, and health practices by different areas of the state will be a major aid to health professionals.

3. A basis for understanding the impact of differing conditions on health delivery systems will be a useful contribution to health providers and planners.

4. The level of health knowledge of rural people concerning major illnesses and diseases will be useful to health providers, planners, and educators.

5. Rural intra-group differences in accessibility to health services, aspirations, beliefs, health knowledge, and physical health status will provide much needed information to health professionals serving rural Ohioans and other areas.

Theoretical Orientation

The theoretical perspective used in this research is the application of cultural-lag theory to local health practices of two intra-rural groups. William F. Ogburn applied this formulation specifically to modern, industrial societies in which the material culture, through rapid advances in technology and science, has developed at a much faster rate than that part of the non-material culture (adaptive) which regulates man's adjustment to the material culture.

The thesis of cultural-lag holds that in modern societies there has been a tendency for changes in the political, educational, family, and religious institutions not to keep pace with technological changes (Leslie, 1973:164).

The Appalachian society due to a multiplicity of historical and cultural factors has a peculiar content and quality which sets it apart from the rest of the nation. The result of these factors has been the development of a value system which is supported, to a remarkable degree, by both social and economic aspects of the Appalachian subculture. The geographical isolation of the region, the historical value of individualism, the predominance of extractive industry, the exposure to long periods of low income, and lack of group experiences has created a low income culture.

The health behavior of Appalachians is said to lag behind other groups in American society. This issue will be examined by comparing their patterns of medical care with rural non-Appalachians. Behavioral areas to be studied include: attitudes toward health and illness; differential health practices; variations in physical health, levels of health knowledges; and variability in the use of health services.

This study maintains that it is the effects of cultural-lag in certain elements of Appalachian culture that are responsible for the current trends in health practices in the region.

Methodology

The survey design called for a stratified randon sample of Ohio's counties by randomly selecting one county and an alternate from each of the state's ten Cooperative Extension Service areas. Each service area is composed of counties with similar topography, climatic conditions, and type of farming.

Cluster samples of ten or less farm and rural non-farm families (living outside incorporated places) were randomly selected in each of the ten counties. Two hundred and fifty families were interviewed from each of the ten counties. Only the head of the household or other responsible adult from either a rural farm or rural non-farm family was interviewed. Criteria for inclusion in the sample conformed to the 1969 Census of Agriculture which defined a farm family as any family living at a residence operated as a unit of ten or more acres from which agricultural sales amounted to $50 or more. In this study residences of less than ten acres were counted only if the agricultural sales totaled $250 or more. A rural non-farm family was designated as a family not living in an incorporated area. For the non-farm family agricultural sales were irrelevant.

The respondents were personally interviewed by trained volunteers beginning in April 1979. All interviews were completed within two weeks. The final sample was divided into families living in Appalachian and non-Appalachian counties. Of the 1,909 families interviewed, 1,354 were rural non-Appalachian and 555 were rural Appalachian. The non-Appalachian sample comprised 0.65 percent of the rural residents residing in the seven counties defined as non-Appalachian. The Appalachian sample comprised 1.7 percent of the rural population residing in the three counties defined as Appalachian.

It should be noted that additional information specific to this study was collected from a supplementary questionnaire with every third and seventh household interviewed.[1] Respondents agreed to complete the schedule by mail within two weeks. Questionnaires from 296 households were returned of which 212 were rural non-Appalachian and 84 rural Appalachian families.

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[1] The second questionnaire sought information concerning health status factors, (i.e., attitudinal data) not contained on the first schedule. The smaller sample represents 15.5 percent of the total sample.

FINDINGS

Perceived Health Status

Perceived health status was expected to reflect cultural factors as well as situational realities. To test the hypothesis, an analysis of variance test* was conducted on these data. A statistically significant difference was found between the two groups at the .01 level in perception of health status. Rural Appalachians report a poorer perceived health status than do rural non-Appalachians.

Preventive Health Practices

An analysis of variance test was conducted to examine both cultural and sex variations between selected preventive health behavior of the two groups. Selective preventive health practices of males at least 25 years of age include: chest x-ray, general physical, dental check-up, electrocardiogram (EKG), blood pressure check, and blood sugar test for a total of six practices. Practices of females at least 25 years old will include the same selected practices, plus the pap test.

Both male and female rural Appalachians reported significantly lower levels of preventive health behaviors. The health behavior hypothesis concerning adult males revealed a significant difference at the .05 level. The female health behavior hypothesis was found to have a significant difference at the .01 level.

Morbidity

Mortality (the death rate) and morbidity (proportion of diseased persons in a given locality) have been the traditional measures of health. Authors confirm that the prevalence of such disorders is clearly higher in rural than in urban areas (Albrecht and Miller, 1973:3).

Three specific indicators were suggested to identify the relationship between culture and prevalence of chronic diseases. The three morbidity indicators selected involve: 1) the total number of diagnosed ailments per respondent (including the spouse), 2) if medical treatment had been prescribed for the diagnosed ailment; and lastly, 3) if medical treatment was currently being pursued.

Analysis of morbidity indicators[2] established and revealed significantly the expected differentials at the .01 level. Appalachian respondents and their spouses clearly reported higher rates of diagnosed chronic ailments. Significant morbidity differentials were found in higher rates of prescribed medical treatment and continued medical treatment for selected diagnosed chronic ailments of rural Appalachians.

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*Further information concerning statistical data may be obtained by writing the author.

[2] Morbidity was measured by counting the number of physician diagnoses which were limited to the following nine chronic conditions: diabetes, cancer, high blood pressure, heart disease, strokes, glaucome, lung disease, arthritis, and kidney disease.

Health Knowledge

The third component in this section is concerned with assessment of health knowledge whose indicators include cancer, heart disease, stroke, diabetes, and high blood pressure.[3]

The analysis of variance yielded a significant difference between the two groups in overall accuracy on the health knowledge test at the .01 level. The nine test items were then disaggregated from the original set and analyzed separately in order to determine which content areas revealed the greatest discrepancy between the two groups. The analysis revealed discrepancies in three specific content areas. The items in these areas contained information on heart disease, blood pressure, and diabetes. Rural Appalachians do differ from rural non-Appalachians in demonstrating accuracy on a health knowledge test. That is, they scored at a significantly lower level than rural non-Appalachians.

Differential Aspects of Physician Interaction

Differential aspects of physician interaction will be measured in five ways: as identification of symptoms warranting medical attention and the rapidity with which care is sought, and by last visit to physician, family physician, satisfaction with physician, office waiting time, and visit duration with physician. The Mann-Whitney U Test was selected for the statistical analysis.

Discussion of Differential Aspects of Physician Interaction Findings

The relationship between culture and differential aspects of physician interaction did not prove to be significant. Rural Appalachians did report longer waiting times for physicians at a significant .01 level, but this may be a product of access rather than any cultural explanation. These data do not provide a base for clarity on this issue. Rural Appalachians did report a slightly greater amount of time interacting with physicians, less rapidity in seeking physician care with ill, less recent contacts with physicians and more dissatisfaction with their physician than did rural non-Appalachians but not at significant levels. These findings could be due to the convergence of rural-urban behavioral patterns.

Conclusions and Implications of the Research Findings

The research findings of the present study suggest: 1) rural Appalachians/rural non-Appalachians differentiation still exists; 2) rural Appalachian/rural non-Appalachian differences are converging. The implications suggest there is a definite link between cultural-lag and rural Appalachian health and illness behavior. Differential morbidity, differential preventive health practices, access and lower levels of health knowledge patterns do exist. Differential morbidity and preventive health practices can be expected to persist unless efforts are directed at modifying these behaviors.

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[3] Reynolds' rural health study (1976:88) indicates that class, ethnic, and racial factors demarcate health attitudes and health knowledge more clearly than do sex factors. Membership in any of these groups have far-reaching effects upon the experiences and preferences of the individual (including health care).

To capitalize on the medical contacts, a number a suggestions can be proposed. The average waiting time (which was longer for rural Appalachians) in the physician's office can be constructive. A comprehensive, wholistic approach to assess the entire family and anticipate and reinforce health behaviors should be encouraged, regardless of the purpose of the visit. Programs and health services should focus on peer or significant other support for effective communication and shaping health behavior expectations. Critical points of intervention for effective socialization of appropriate behaviors lie in maternal-child contacts and school health programs as well.

Implications for policy can also be suggested. Federal and state health planning and analysis at all levels should ensure quality services and assess their client populations for differential assess. Behavioral considerations must be addressed. Services should appeal to culturally diverse groups. Consumer behavior should be examined to identify the state of illness and the conditions for which attention is sought and the type of attention sought. Receptivity to health services and practices could be engendered in consumers.

An analysis of sub-group behavior differentials lays the groundwork for delivery of effective health service designed as a means to reduce morbidity, rather than as an end in itself. Cultural lag theory has the potential for explaining differentials, but better indicators of the differentials must be defined or constructed to tap this potential to a meaningful degree. Cultural lag theory might prove a meaningful perspective for evaluating specific behaviors.

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SESSION E

QUALITY OF LIFE

PERCEPTIONS OF THE FUTURE: THE EFFECTS OF FAMILY STRUCTURE AND LEVEL OF LIVING, Gail S. Andol and Louis H. Bluhm, Mississippi State University.

COMMUNITY ASSESSMENT STUDIES: VIEWS FROM YOUTH, INFLUENTIAL, AND HOUSEHOLD SAMPLE RESPONDENTS, Ernest J. Bowen and Edward L. McLean, Clemson University.

WORK ENVIRONMENT AS A FACTOR OF QUALITY OF LIFE IN SELECTED RURAL COUNTIES OF MIDDLE GEORGIA, Nathaniel B. Brown, Jr., Melvin E. Walker, Jr., and Mary L. Jones, The Fort Valley State College.

ECONOMIC PERCEPTION OF THE FUTURE AND LEVEL OF LIVING: THE EFFECT OF OCCUPATIONAL AND MARITAL STATUSES[1]

Gail S. Andol and Louis H. Bluhm
Mississippi State University

Introduction

Race, family, and occupation are significant factors which influence the life styles of most people. These factors are often related to objective levels of economic well-being. However, race, family, and occupation are also important sources of subjective identification for individuals. Since these characteristics affect self-perceptions, it seems reasonable to suggest that the same characteristics might also affect the way individuals perceive the future. Consequently, optimism or pessimism about the economic future, as well as objective economic well-being, would seem to be associated with racial, familial, and occupational characteristics.

Race and family are traditional sources of subjective identification. Prior to modern times, the family performed the basic function of giving status and prestige to its members (Ogburn, 1938). Neff (1968) argues that the traditional sources of identification are becoming less important, while occupation is gaining importance. The significance of occupation as an identifying characteristic is evidenced by the interest group theory of social classes. Interest group theory implies that a person's occupational status and role impose certain attitudes, values, and interests upon him and create a consciousness of membership in a social class which shares those attitudes, values, and interests (Centers, 1949). Furthermore, Kahl (1953) views these social classes as ideal types characterized by particular value orientations.

In addition to being a source of identification, work is considered to fulfill a variety of other human needs, the most basic of which is economic. Work may also be seen as providing for the regulation of life activity, the opportunity for sociability and meaningful life experiences. Friedmann and Havighurst (1962) found that different occupational groups tended to place different emphasis on these meanings of work. However, association, routine, self-respect, and respect from others were equally important meanings for all occupational groups. Most people, then, seem to derive some nonmonetary satisfactions from work.

For many people, retirement seems to indicate social, as well as economic losses. Without an earned income, the retired person usually becomes dependent upon fixed social benefits. In addition to this economic change, the individual may also experience the loss of an important source of identification, as well as the loss of other satisfactions associated with work. Retired males seem to experience a combination of economic and social losses which might contribute to an attitude of pessimism. As a result, retired males might tend to be more pessimistic about their economic future than males who were in the labor force.

Marital status may also influence self-perceptions and perceptions of the future. The family as an institution may be losing importance as a source of identification. However, the family may be gaining importance as a source of emotional support (Eshleman, 1978). If this is the case, married males may have more potential sources of emotional support than single males. Since emotional support is often viewed as contributing to general well-being, married males might tend to feel more optimistic about the future in general and the economic future in particular.

In 1978, 54.1 percent of these married males had working wives. The figure for blacks, 64.1 percent, is somewhat larger than that for whites, 53.4 percent. These families generally have slightly higher incomes. For example, families with working wives had a median income of 24,474 dollars in 1978 compared to 20,542 dollars for families in which the wife did not work, a difference of 3932. However, black families seem to experience greater economic gains than white families. The median income for black families with working wives is 6903 dollars more than that for black families with nonworking wives. The difference for white families, on the other hand, is only 3793 dollars.[2]

Families with working and nonworking wives also differ with regard to husbands' attitudes. For instance, husbands of working wives tend to be more liberal with regard to equal pay for women, sharing the housework, and control of the sexual aspect of marriage (Axelson, 1963). Furthermore, Burke and Weir (1976) found that professionals with working wives were less concerned with power and authority than those whose wives did not work.

Prior research indicates that these families may differ with regard to marital adjustment and stress as well. Husbands with working wives indicated poorer marital adjustment than those with nonworking wives (Axelson, 1963). Furthermore, if the wife's employment is an economic necessity, the husband's marital happiness tends to be lower and tensions tend to be higher than those for husbands of housewives (Orden and Bradburn, 1969). However, the same study indicates that if the wife works by choice, the husband's marital happiness may be higher and tensions may be lower than those for husbands of housewives. In terms of stress, Burke and Weir (1976) found that husbands of working wives seem to experience greater stress; however, Booth (1977) found no significant difference in the amount of stress experienced by husbands of working and nonworking wives.

These studies suggest that husbands of working wives tend to experience poorer marital adjustment and increased stress. However, having a working wife may also be viewed as having a positive effect on husbands' attitudes. For example, working wives may serve to decrease the amount of economic pressure felt by husbands, since they are no longer the sole providers for their families. Therefore, males with working wives might tend to be more optimistic about their economic future than those whose wives did not work.

The previous discussion suggests that differences in both subjective perception of the economic future and objective economic well-being might be associated with retirement status, marital status, and wife's employment status. With regard to economic perception of the future, this discussion implies that retired males may be more pessimistic than working males. Of those males who are working, married males may be more optimistic than single males. Finally, married males with working wives may be most optimistic about the economic future.

Methods

Sample. Data from a random area cluster sample of rural residents (N=295) were collected in 1977 in Oktibbeha County, Mississippi. All household heads and any employed household members were interviewed. A subsample of male household heads (N=152) is used for this analysis. The subsample includes 91 whites and 61 blacks.

Measures. Economic perception of the future was calculated from two subjective variables, perception of present economic position and perception of future economic position. Respondents were asked to locate their present and future positions on a ten step "economic ladder." The score for present position was subtracted from the score for future position, and this difference was used as a measure of the respondents' subjective views of their economic future. Positive values indicate the optimistic attitude that the future will be better than the present; negative values indicate the pessimistic attitude that the future will be worse. The values ranged from -3 to 8, Table 1, with similar distributions for blacks and whites. The mode for both races is 0; 44.7 percent of the white and 41.8 percent of the black household heads felt that the future would be about the same as the present.

A level-of-living index was used to estimate objective economic well-being. The level-of-living index is based, in part, on Belcher's (1972) approach of designating functional tasks in the household. For each task considered, appropriate functional alternatives were ranked in terms of technological sophistication, and the ranking of the highest item possessed was used as the score. In addition to these scores, scores indicating the possession of entertainment and vacation items were used to form an additive index. The index scores ranged from 10 to 73, Table 2. Blacks tend to have lower level-of-living index scores than whites. The mean for blacks is 39.6; the mean for whites is 53.7.

Analysis

When means for subjective perception of the economic future are calculated for the status related categories of male household heads, the trends for blacks and whites are similar, Table 3. The means for retired males are much smaller than those for other categories, indicating that these males do tend to be more pessimistic about the economic future. Of those males who are working, married males have higher mean scores than single males, and males with working wives have the highest mean scores, indicating the greatest degree of optimism. Two-way analyses of variance was used to determine the statistical significance of these differences, Table 5. The F value associated with the status related categories is 8.922 (probability beyond .001). However, Duncan's range test indicates that only the means for retired males can be considered significantly different from the mean for black males with working wives.

Although the trends for black and white household heads are similar, black males tend to be somewhat more optimistic than white males. Table 3 indicates that, with the exception of single blacks, black males in each category have slightly higher mean scores than whites. However, the F value associated with race, 1.024, is not statistically significant, Table 5.

The trends for black and white household heads are also similar with regard to objective economic well-being, Table 4. For both racial groups, single males have the lowest mean level-of-living index scores. Retired males have somewhat higher scores, and married males have the highest mean scores. Males with working wives have slightly higher mean scores than males whose wives are not working.

The results of the two-way analyses of variance for the level-of-living index are found in Table 6. The F value associated with the status related categories is 16.907 (probability beyond .001); the F value associated with race is 67.230 (probability beyond .001). The results of Duncan's range test are similar for blacks and whites. For both racial groups, the mean for single males is significantly different from those for both categories of married males, but not from the mean for retired males. However, the mean for males with working wives was not significantly different from that for males with nonworking wives for either blacks or whites.

Several interesting findings emerge when the category means for subjective perception of the economic future are compared to those for the level-of-living index. Despite significant differences in present levels of economic well-being, black and white household heads have rather similar perceptions of the economic future. Figure 1 indicates that the racial differences for single and retired males are extremely small. Although the racial differences for the two categories of married males are not statistically significant, they are somewhat larger than those for single and retired males. These discrepancies in racial differences for the status related categories suggest the possibility that black and white males may perceive family roles somewhat differently.

A comparison of the two measures for single and retired household heads indicates that single males do not seem to be extremely pessimistic about the economic future, even though they have the lowest mean level-of-living index scores. Retired males, on the other hand, express the greatest degree of pessimism, even though their mean index scores are not extremely low. These findings presumably reflect a general expectation of improved economic position on the part of single males, while retired males usually must anticipate living on fixed social benefits despite rises in the cost of living.

Married males in general indicate greater optimism and higher levels of economic well-being than single and retired males. In this particular sample, the males with working wives seem to experience greater benefits. Although the differences are not statistically significant, males with working wives tend to be slightly more optimistic and to have slightly higher levels of living than males whose wives are not working. However, Figure 2 indicates that black and white household heads tend to differ in the degree to which they benefit economically from having a working wife. In this sample, black household heads with working wives experience an increase of 6.037 in the mean level-of-living index score. Whites, on the other hand, experience an increase of only 1.956.

According to Table 7, the occupational distributions of these black and white household heads are also rather different. The white males indicate a broad range of occupational classifications, while the black males tend to be employed mainly as wage earners. However, similarities between the racial groups emerge when males with working and nonworking wives are compared. For both groups, males with nonworking wives tend to indicate slightly higher occupational levels. For white household heads with nonworking wives, the percentage of wage earners and white collar workers is smaller and the percentage of self-employed males is larger than for males with working wives. The percentage of wage earners is also smaller for black heads with nonworking wives, while the percentages of craftsmen, professionals, and self-employed males are larger.

These findings might be viewed in relation to norms regarding acceptable standards of living. The occupational distributions and the level-of-living index scores suggest that married blacks may be less able to provide acceptable standards of living for their families. In this sample, the black working wife does tend to have some impact upon the family's economic well-being.

Married whites, on the other hand, seem to be better able to provide acceptable standards of living for their families. Furthermore, the occupational distributions suggest that white males with nonworking wives may be somewhat better able to provide these standards than males with working wives. Since the economic impact of the white working wife tends to be rather small, it could be argued that these wives may tend to work outside the home to acquire the normatively defined standard of living when the husband is unable to provide this standard. Despite indications of changing family roles, those wives whose husbands are able to provide the acceptable standard of living may tend to realize the nonmonetary satisfactions associated with work in more traditional ways.

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FOOTNOTES

1. These data are made available by the Mississippi Agricultural and Forestry Experiment Station Project, MIS-4017, titled "Industrial Work Roles: A Study of Labor Mobility and Stability." This paper was prepared for presentation at the Annual Meeting of the Rural Sociology Section, Southern Association of Agricultural Scientists, February 3-6, 1980, in Hot Springs, Arkansas.

2. The percentage of male household heads with working wives and the median incomes for families with working and nonworking wives are found in Table 2, page 9, of the Current Population Report Money Income and Poverty Status of Families and Persons in the United States: 1978.

TABLE 1

DISTRIBUTION OF MALE HOUSEHOLD HEADS BY ECONOMIC SELF-PERCEPTION OF FUTURE AND RACE

Economic Self-Perception Of Future		Race			
		Whites		Blacks	
		N	%	N	%
Optimistic	8			1	1.8
	7	1	1.2	1	1.8
	5	2	2.4	1	1.8
	4	3	3.5	3	5.5
	3	7	8.2	3	5.5
	2	17	20.0	11	20.0
	1	15	17.6	9	16.4
	0	38	44.7	23	41.8
	-1			2	3.6
Pessimistic	-3	2	2.4	1	1.8
Total		85*	100.0	55*	100.0

* Six of the 91 whites and 6 of the 61 blacks have missing values for economic self-perception of future.

TABLE 2

DISTRIBUTION OF MALE HOUSEHOLD HEADS BY LEVEL-OF-LIVING AND RACE

Index Score	Race			
	Whites		Blacks	
	N	%	N	%
64 - 73	19	20.9		
53 - 63	28	30.8	8	13.1
42 - 52	37	40.6	22	36.1
31 - 41	5	5.5	14	22.9
20 - 30	2	2.2	14	22.9
10 - 19			3	4.9
Total	91	100.0	61	99.9*

* Deviation from 100.0% is due to rounding error.

TABLE 3

DISTRIBUTION OF ECONOMIC PERCEPTION OF FUTURE MEANS BY STATUS OF MALE HOUSEHOLD HEAD AND RACE

Status	Race	
	Whites	Blacks
	$\bar{X}$	$\bar{X}$
Single	1.091 (N=11)	1.000 (N=4)
Married, Wife Not Working	1.303 (N=33)	1.786 (N=14)
Married, Wife Working	1.714 (N=21)	2.125 (N=16)
Retired	.100 (N=20)	.190 (N=21)
Total	N=85*	N=55*

* Six of the 85 whites and 6 of the 61 blacks have missing values for economic perception of future.

TABLE 4

DISTRIBUTION OF LEVEL-OF-LIVING INDEX MEANS BY STATUS OF MALE HOUSEHOLD HEAD AND RACE

Status	Race	
	Whites	Blacks
	$\bar{X}$	$\bar{X}$
Single	42.000 (N=12)	31.000 (N=4)
Married, Wife Not Working	57.000 (N=34)	41.375 (N=16)
Married, Wife Working	58.936 (N=23)	47.412 (N=17)
Retired	49.682 (N=22)	34.458 (N=24)
Total	N=91	N=61

TABLE 5

TWO-WAY ANALYSES OF VARIANCE FOR ECONOMIC PERCEPTION OF FUTURE

	Economic Perception of Future			
Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F
Total	405.143	139	2.915	
Main Effects	68.503	4	17.126	6.742*
Status	67.989	3	22.663	8.922*
Race	2.600	1	2.600	1.024
Interactions	1.330	3	.443	.174
Explained	69.333	7	9.976	3.927*
Error	335.310	132	2.540	

* P ≦ .001

TABLE 6

TWO-WAY ANALYSES OF VARIANCE FOR LEVEL-OF-LIVING INDEX

	Level - of - Living Index			
	Sum of Squares	Degrees of Freedom	Mean Square	F
Total	22838.964	139	164.309	
Main Effects	10969.092	4	2742.273	31.005*
Status	4485.946	3	1495.315	16.907*
Race	5946.133	1	5946.133	67.230*
Interactions	195.104	3	65.035	.735
Explained	11164.197	7	1594.885	18.032
Error	11674.767	132	88.445	

*P ≦ .001.

TABLE 7

PERCENT DISTRIBUTION OF MARRIED HOUSEHOLD HEADS BY HUSBAND'S OCCUPATION AND WIFE'S EMPLOYMENT STATUS

	Whites		Blacks	
	Wife Working	Wife Not Working	Wife Working	Wife Not Working
Unemployed	4.5 (N=1)	3.0 (N=1)	5.9 (N=1)	6.2 (N=1)
Wage Earner	27.3 (N=6)	21.2 (N=7)	88.2 (N=15)	68.8 (N=11)
Craftsman	18.2 (N=4)	18.2 (N=6)		12.5 (N=2)
White Collar	22.7 (N=5)	15.2 (N=5)		
Professional	13.6 (N=3)	12.1 (N=4)	5.9 (N=1)	6.2 (N=1)
Self-Employed*	13.6 (N=3)	30.3 (N=10)		6.2 (N=1)
Total	99.9** (N=22)	100.0 (N=33)	100.0 (N=14)	99.9** (N=16)

* This category includes small businessmen and farm owners or operators.

** Deviation from 100.0% is due to rounding error.

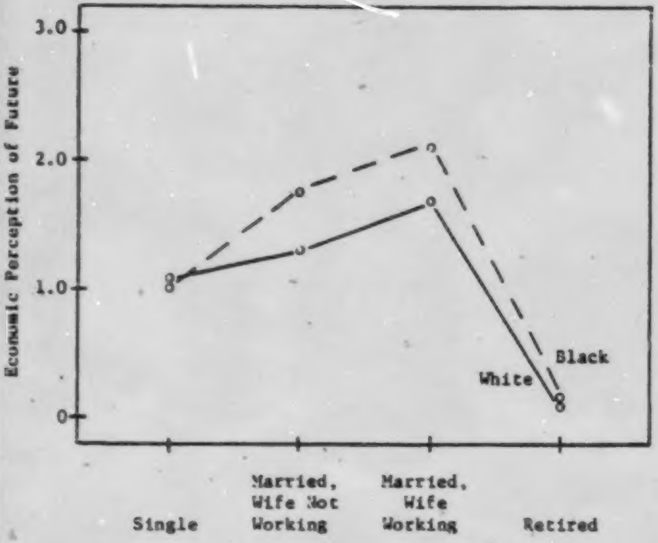

Figure 1. Economic Perception of Future Means For Status Classifications of Male Household Heads

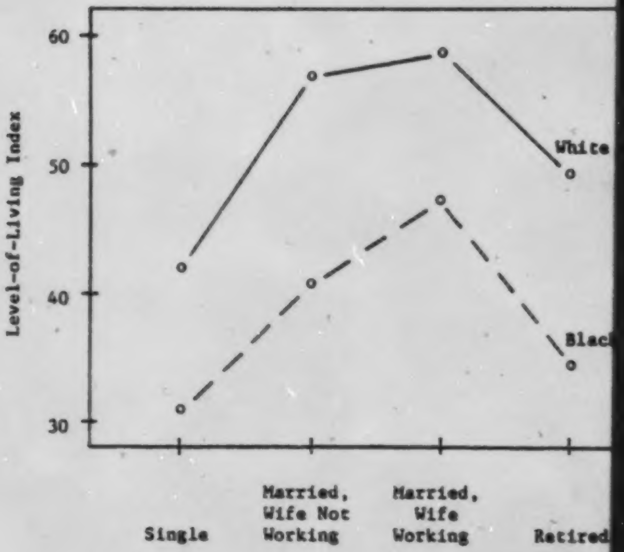

Figure 2. Level-of-Living Index Means For Statu
Classifications of Male Household Hea

COMMUNITY ASSESSMENT STUDIES: VIEWS FROM YOUTH AND HOUSEHOLD SAMPLE RESPONDENTS*

Ernest J. Bowen
Edward L. McLean**

The purpose of this paper is to examine the topic of youth involvement in community development programs and specifically to explore the contribution of applied research in such programs. Youth may be defined as junior high school and high school students and individuals under 20 years of age, not having established a separate household. Community development is generally defined as intentional efforts to initiate and implement new or modified institutional structures, functions, or activities, with or without resources external to the community. The geographic scale is smaller than a county but larger than a neighborhood. Applied research (also a general definition) includes community inventories, needs assessment, problem identification, in-depth studies of particular issues or functions, and may indirectly inquire of policy directions or action. It is assumed that the community development process is at least informally initiated prior to the design and conduct of applied research. Applied research must be directed toward gaining knowledge about the community and the functions, problems, and issues within the community. Findings from the research are incorporated into the community development process, providing knowledge and bases for action on new or modified institutional structures, functions, or activities.

Participation of youth in community affairs has not always been considered essential. Components of social change, particularly during the past 25 years, have substantiated roles of many categories of citizens in U.S. society. High birthrates during the late 1940's and 1950's provided large numbers of youth and favorable economic conditions

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**Research Assistant and Professor, respective, Department of Agricultural Economics and Rural Sociology, South Carolina Agricultural Experiment Station, College of Agricultural Sciences, Clemson University, Clemson, S.C. 29631.

allowed most to be liberated from child labor. Socialization, with some contributions from the media, is accelerated, with adolescents being more informed and independent. Civil unrest of the 1960's and voting rights for individuals 18 years of age and older, have chronicled the need to recognize youth. One author (Green, 1977) suggests that a foremost challenge is to utilize and harness the knowledge and energy of youth. Hence, the authors of this paper contend that youth should be involved in applied research and subsequent community development efforts. This is particularly essential where the outreach is initiated by public elementary and secondary school districts, and for functions such as public education, recreation, and opportunities for high school graduates.

LITERATURE

The community development literature provides support for applied research in community development programs and emphasizes the benefits of needs assessment and problem identification studies (Padgett and McLean, 1979; Tankersly, 1976). Examples of development activities including youth and also supported by research, imply that youth are an integral part of extension and other application programs (Rutledge, et. al., 1979; Taylor and King, 1979). The literature sanctions the principle that all segments of the population must be informed and subsequently served in the process of community development (Arnstein, 1969).

But when the record is reviewed, it is concluded that most community development programs rely on only a few segments of the community and applied research may delete important groups, such as the young, the elderly, ethnic minorities, and lower socioeconomic residents (Edwards and Jones, 1976). Programs in which youthful members of the community are involved in research, as well as action, appear to be rare. The authors of this paper were thus directed to literature reporting research conducted by educators. Based on those references reviewed by the authors, the approaches, methodology, and results are more impressive than reported in community development literature.

Community outreach, emanating from public elementary and secondary education districts, customarily follows a deliberate set of objectives including empirical research (Ratcliff, 1979). The research designs are based on models to identify all segments of the community, to conduct general surveys of the entire population, and to direct specific inquiries to relevant sub-groups within the community (Kaufman and English, 1977; Parker and Patterson, 1979). The pragmatic goals are frequently oriented to involvement of parents of students (Nebgen, 1979), but particular neighborhoods may be the prospective recipients of community service in general (Borman, et. al., 1978). These researchers have refined survey procedures, including the use of efficient checklists to determine attitudes and needs on a wide range of issues and functions (Cusick, et. al., 1979). Sophisticated methodologies have been generated to determine student evaluations of community functions as well as components of junior high school and high school programs (Marksberry, 1979). This brief review of literature from research conducted by educators, reveals that subgroups in the community must be considered and that appropriate methodology can be incorporated into our research design. For the research in this report, the authors have utilized principles of questionnaire design and item content from the above references, for preparation of questionnaires used in the research reported here.

THE RESEARCH

Community development specialists of the South Carolina Cooperative Extension Service received a request, in early 1979, for assistance with a community education project, from the Paris* County School District. The district had received state and federal funds for community education in part of the county, a relative large geographic area approximating two Northwest Ordinance Survey counties. This area is essentially rural with one incorporated place of 2,100 inhabitants and 35 percent black population. The study area includes two high school attendance areas with one high school career center, centrally located.

A Community Education Advisory Council comprising 24 members, was established by asking individuals, previously known to be active in community affairs, to serve. The council membership includes 8 males, three blacks, and three high school students. The council was to initiate community service activities and advise the school district about matters directly or indirectly associated with school programs. The council, through the district, requested needs assessment/problem identification surveys to be conducted with high school students and household respondents of the study area. The request was forwarded to Cooperative Extension Service and Agricultural Experiment Station personnel, Department of Agricultural Economics and Rural Sociology, Clemson University.

In April, 1979, a decision was made to administer a questionnaire to all high school seniors in attendance on a given day. The questionnaire was administered to four groups of students (approximately 50 each, a total of 201 high school seniors) on April 26, 1979. This questionnaire contained items and checklists concerned with: life goals, communication and transportation, economic development, education, social well-being, recreation, and willingness to work on community problems.

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*Fictitious names are used for the study county and for incorporated places and hamlets in that and adjacent South Carolina counties.

The council, also in April, 1979, requested that a similar questionnaire be administered to household heads or spouse of heads. The council would provide names of individuals to comprise a recommended list of respondents. This is a rather select list of prospective respondents - higher socioeconomic level, higher educational attainment, and more likely to have household members in elementary and/or secondary school, than the composite population of the area. The researchers, consequently, determined those geographic sub-areas which were under represented by the council's list and employed a random geographic sampling procedure to obtain additional respondents. The former respondents are termed "required" respondents and the latter "sample" respondents.

A questionnaire was administered to required respondents and sample respondents in late May, 1979. This questionnaire contained items and checklists concerned with: agriculture and farming, education, economic development, social well-being, communication and transportation, and willingness to serve on community problems.

Of the 201 high school seniors completing questionnaires, half were male and half female (as expected), 36 percent were black, and nearly half were from farms. Of the 267 heads of households or spouse of head completing the questionnaire, 55 percent were female, 14 percent were black, and 46 percent were farmers.

The high school seniors are, consequently, representative of all households in the area in which individuals of that age (and attend high school) reside. Eighty of the 267 household respondents are "sample" respondents, and 186 are "required" respondents (type of respondent is not available for one respondent). The latter group of respondents are more highly educated, more likely to be 40-59 years of age, and more likely to have children in elementary and secondary school, than for the composite of all households in the area. Many of this 186 had previously served in some civic capacity, but few were truly active in community affairs.

FINDINGS

In order to review the role of youth in applied research for community development programs, the authors will discuss results, from the high school senior and household respondents, that are from exactly comparable questionnaire items.* Representative tables are presented from five questionnaire topics. The table headed EE refers to the evaluation checklist of public high school education programs and change (past three years) in those programs. The table headed RE refers to evaluation of recreation and leisure pursuit services and facilities and change in same. The table headed WB refers to evaluation of social well-being items and change in those items. The table headed EB refers to economic base policy preferences. A table headed PF refers to respondent volunteers to help with community problems by functional specialties. Responses from the checklists are keyed as such: VS = very satisfactory; S = satisfactory; N = neutral; U = unsatisfactory; VU = very unsatisfactory; and dk - don't know.

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*Publications, listed in the Bibliography, may be obtained from the authors of this report. Those publications contain results from all of the tabulations for both high school and household respondents.

Evaluation of Education

On the evaluation checklists, the high school seniors generally indicate larger proportions of "neutral", "unsatisfactory", and "very unsatisfactory" responses. On the items asking for change in quality, the high school seniors indicate smaller proportions of "same" responses and larger proportions of "worse" responses. The variations are particularly great for quality of instruction, parent-teacher cooperation, and community services; i.e., the household respondents evaluated these items much more favorable than did the high school seniors.

Evaluation of Recreation

On the evaluation checklists, the high school seniors are more likely to indicate "neutral" than the household respondents. The high school seniors are generally less critical of public recreation services on the checklists. On the items asking for change in quality, the high school seniors indicate smaller proportions of "same" responses. The high school seniors are slightly more positive about current recreation facilities and services, and more likely to indicate that the trend has been "better" or "worse". It is suggested that some lower socioeconomic youth do not have access to some of the recreation facilities and services in the area.

Social Well-Being

On the checklists, the high school seniors are more likely to indicate "neutral", "unsatisfactory" and "very unsatisfactory" than the household respondents. The checklist for social well-being of the elderly is an exception, where the students provide slightly more favorable evaluations. On the items asking for change in social well-being, the high school seniors are less likely to indicate same and more likely to indicate "worse". The critical responses of the students are particularly evident for social well-being of blacks and of the poor. It is worthwhile to note that the sample of high school seniors is reasonably representative of black and poor households of the area.

Economic Base Policy

The questionnaires included items asking for economic base policy preferences for the area. The high school senior responses are more informative because of few no responses. The slightly higher proportion of "remain agricultural but bring jobs in cities" responses by the students, may be indicative of more realistic opportunities.

Questions were asked about the location of a hypothetical employing firm. A large proportion of high school students responded to this question. The high school seniors are also more cosmopolitan on this item. Larger percentages preferred the county seat city (Freeport) and the largest incorporated place (Atlantic Beach) of the area. A smaller percentage of high school seniors preferred the rural hamlet (Riverview).

Community Problems and Functions

The high school senior and household respondents were asked if they could serve in some capacity to work on community problems. Good response was expected from the household respondents because many were already serving. The response was not particularly impressive, the largest being 32.6 percent of all household respondents volunteering to work on recreation functions.

The response from high school seniors was good, considering that the universe of high school seniors was questioned. Recreation is a very needy function; 48.3 percent of the students volunteered to serve. Although almost half the students are from farms, only 5.5 percent volunteered to serve on that function.

SUMMARY

It is concluded that youth (high school seniors in the study reported here) should be included in community needs assessment and problem identification research. The students indicated more "neutral" but fewer "same" responses on the checklists. The students are probably more knowledgeable of conditions in the high schools. The students were not highly critical of recreation conditions, but large numbers volunteered to work on this function. The students appear to be more knowledgeable of conditions affecting blacks and the poor, and have more realistic views about economic base opportunities. Many students are willing to help with community problems and functions, particularly recreation.

EPILOGUE

Community development activities have been initiated by the Community Education Advisory Council and the school district. Meetings have been held to discuss public recreation needs, to coordinate efforts with county and state agencies, and initiate requests for funds. Although the results from high school survey were used to substantiate recreation needs, no youth (outside the Council) were invited to participate in the meetings. No formal economic development efforts have been initiated but there has been some discussion of the "economic development everywhere" platitude. (High school seniors were more likely to suggest larger incorporated places as the locale for employment.) Some members of the Council have (informally) discounted the high school senior evaluations of high school education with comments such as "they were just tired of school." In fairness to those critical of student participation, there are cases in which the students participate superficially or only on phases about which they were enthusiastic.

The authors of this report conclude that applied research with youth, such as reported here, is beneficial, should be reviewed by those responsible for community development, and that youth should be involved in the community development process. Development efforts are occurring in the South Carolina case reviewed above, but it remains to be seen if youth will be involved or if efforts will be directed toward public high school education or social well-being. Finally, it is suggested that community assessment and outreach programs implemented by educators, and not involving community representatives, may be more effective than efforts involving groups such as an advisory council.

Table EE-2
Evaluation of Education
High School Instruction

Households

Evaluation	Number	Percent
VS	7	11.5
S	42	68.8
N	3	4.9
U	5	8.2
VU	2	3.3
dk	2	3.3
Total	61	100.0

Change		
Better	14	23.0
Same	38	62.3
Worse	3	4.9
dk	6	9.8
Total	61	100.0

High School Seniors

Evaluation	Number	Percent
VS	4	2.1
S	75	39.9
N	48	25.5
U	38	20.2
VU	18	9.6
dk	5	2.7
Total	188	100.0

Change		
Better	30	16.9
Same	111	62.3
Worse	26	14.6
dk	11	6.2
Total	178	100.0

Table RE - 3
Evaluation of Recreation
Non-School Athletic Activities for High School Aged Individuals

Household

Evaluation	Number	Percent
VS	12	4.7
S	112	43.6
N	24	9.3
U	56	21.8
VU	27	10.5
dk	26	10.1
Total	257	100.0

Change		
Better	53	20.7
Same	168	65.6
Worse	4	1.6
dk	31	12.1
Total	256	100.0

High School Seniors

Evaluation	Number	Percent
VS	23	13.1
S	55	31.3
N	51	29.0
U	24	13.6
VU	18	10.2
dk	5	2.8
Total	176	100.0

Change		
Better	80	49.4
Same	60	37.0
Worse	15	9.3
dk	7	4.3
Total	162	100.0

Table WB-4
Social Well-Being
Blacks in the Locality

Households

Evaluation	Number	Percent
VS	24	9.2
S	165	63.3
N	29	11.1
U	23	8.8
VU	5	1.9
dk	15	5.7
Total	261	100.0

Change		
Better	97	37.2
Same	139	53.3
Worse	9	3.4
dk	16	6.1
Total	261	100.0

High School Seniors

Evaluation	Number	Percent
VS	33	17.6
S	44	23.4
N	57	30.2
U	16	8.5
VU	30	16.0
dk	8	4.3
Total	188	100.0

Change		
Better	51	28.7
Same	71	39.8
Worse	48	27.0
dk	8	4.5
Total	178	100.0

Table EB-1
Economic Base Policy
Future of the Locality

Households

Policy	Number	Percent
Remain Agricultural (a)	30	12.2
Remain Agricultural with more job opportunities in cities (b)	37	15.1
More Job opportunities throughout (c)	147	60.1
Choice (a) and (c)	9	3.7
Choice (b) and (c)	6	2.4
Choice (a),(b) and (c)	2	.8
Don't Know	14	5.7
Total	245	100.0

High School Seniors

Policy	Number	Percent
Remain Agricultural (a)	12	6.0
Remain Agricultural with more job opportunities in cities (b)	47	23.4
More Job opportunities throughout (c)	125	62.1
Choice (a) and (c)	3	1.5
Choice (b) and (c)	2	1.0
Choice (a),(b) and (c)	0	-
Don't Know	12	6.0
Total	201	100.0

Table PF - 1
Community Problems and Functions
Willing to Serve by Functional Specialty

Household

Specialty	Number and Percent(of 267) Willing to Serve Number	Percent
Economic Development	38	14.2
Communication/Transportation	39	14.6
Local Government	48	18.0
Agriculture/Farming	62	23.2
Education	73	27.3
Recreation	87	32.6
General Community Development/Other Specialty	79	29.6

High School Seniors

Specialty	Number and Percent(of 201) Willing to Serve Number	Percent
Economic Development	19	9.5
Communication/Transportation	24	11.9
Local Government	27	13.4
Agriculture/Farming	11	5.5
Education	39	19.4
Recreation	97	48.3
General Community Development/Other Specialty	40	19.9

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THE QUALITY OF LIFE OF THE RURAL POOR IN NINETEEN SELECTED COUNTIES IN MIDDLE GEORGIA*

N. B. Brown, Jr. and M. E. Walker, Jr.**

ABSTRACT

A quality of life index which emphasized the physical aspects of well-being was developed. Comparisons were made between (1) the poor and non-poor, and (2) persons with [illegible]stories of poverty who are currently in poverty and persons with long histories of poverty who have escaped poverty.

As expected, the quality of life among the poor was low when compared with that of the non-poor. Significant differences in the quality of life of persons with poverty histories who have escaped poverty and those who remained in poverty were indicated. Significant differences were also found between the quality of life of Blacks and Whites, with Blacks having the lower quality of life index, regardless of socio-economic situation.

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**Research Associate and Associate Professor of Agricultural Economics, Rural Development Research, Fort Valley State College, Fort Valley, Georgia.

INTRODUCTION

Over the past decade economists, sociologists, and governmental officials have concerned themselves with the "quality of life" issue. The principal focus has been on social indicators, global models with emphasis on well-being, characteristics of materialism (e.g., income, physical assets, housing, schools, etc.), and individual perceptions of one's status compared to the norm in society. However, there appears to be a problem in measuring the maximum utility of quality of life with a composite set of variables that combines objective measures with subjective measures. Gerson (1976) emphasized the fact that this issue is explicitly demonstrated in public discourse. He pointed out that if continued studies on quality of life are performed two important things in defining the quality of life need to be considered: (1) The individual approach and (2) the transcendental approach. The individual approach stresses the control over circumstances, freedom from constraints, and similar facets of life. On the other hand the transcendental approach tends to stress complimentarity of interest, function, and solidarity of the community over the individual. Cleland and Lin (1977) projects that quality of life can be defined in terms of a summary for a single set of elements that focuses on the well-being of all people living in a composite area (i.e., political unit). In other words, a measure of quality of life is similar to the Gross National Product (GNP) which is developed to represent the economic well-being of the nation, applicable to all aspects of living, an not necessarily economic variables. Coleman (1975) indicates a much different point of view in his research. He states that quality of life is a measure of the individual's feelings of happiness, contentment, well-being and satisfaction among people (i.e., internal control). Campbell et. al. (1976), Marans and Rodgers (1974) support the Coleman viewpoint, but go further to point out that and individuals experiential knowledge contributes to his or her status satisfaction. In other words, life experiences contributes to life satisfaction and should be treated as surrogate indicators. Despite the various differences in defining quality life, limited research has focused on physical assets as a measure of material wealth and quality of life, to make a technical assessment of the status of well-being compared to the norm in society.

In this paper, the notion that quality of life is relative to one's possession of physical assets in taken. In other words, level of physical resources is interpreted as a factor of quality of life. This study is a beginning for continued research that will attempt to show if there is any correlation between subjective and objective factors in determining the quality of life among families in Middle Georgia (i.e., physical assets, individual perceptions and status attainment). This paper however, will focus only on physical assets.

OBJECTIVES

The objectives of this study are:

(1) To determine the quality of life among families in nineteen rural Middle Georgia counties

(2) To compare the quality of life of the poor and non-poor, and

(3) To determine the impact of race on the quality of life.

METHODOLOGY

Data for this study were obtained by personal interviews of 730 heads of household in nineteen selected Middle Georgia counties. The survey was conducted in 1974. These families were stratified on the basis of the economic situation of the respondent in relation to his parents and grandparents. Thus, economic situation in this study refers to the status of the head of household in relation to the head of household's parents and grandparents (i.e., whether the head of household advanced economically when compared to his parents and grandparents). Four groups emerged from this analysis: (1) Poverty Cycled - respondents (heads of household) currently in poverty and both the parents and grandparents were poverty stricken, N - 116, (2) Escaped Poverty - respondents currently out of poverty, but parents and grandparents were poverty stricken, N = 113, (3) Became Poverty - respondents currently in poverty, but neither nor grandparents were poverty stricken, N = 75, and (4) Always Affluent - respondents were poverty stricken, N = 426. Only two of these groups are used in the study, poverty cycle and the escaped poverty.

Selection of Items

Items in the Quality of Life index were drawn from a battery of items whose frequency percentage reflected the consumption patterns of the sampled families (see Table 1). Sixteen items were tested and found signifance in their ability to discriminate. These sixteen items were used.

Construction of the Scale

Items were dichotomized on the basis of possession or non-possession. One point was assigned to each item for possession and zero for non-possession. The maximum score was sixteen. These scores were divided into thirds to reflect low, medium and high.

TABLE 1

ITEMS INCLUDED IN THE SCALE

Item	Possession (Percent)
Piped water	87.7
Hot water	80.3
Inside flush toilet	83.3
Bath tub shower	81.0
Central air	15.1
Kitchen sink	84.5
Freezer	57.0
Dishwasher	13.7
Hair dryer	40.4
Electric beater/mixer	66.4
Vaccum cleaner	51.0
Clothes dryer	35.8
Telephone	65.6
Monthly magazine	36.6
Weekly newspaper	35.0
Daily newspaper	31.5

Findings

Results of this analysis are presented in tables 2-7. As expected, the quality of life among the poor was low when compared with that of the non-poor. Significant differences in the quality of life of persons with poverty histories who have escaped poverty and those who remain were shown. Poverty cycle families had much lower quality of life indexes than escaped poverty families (see table 3). The chi-square value (X^2=44.59) implies that a strong relationship exist between poverty cycle and escape poverty families and the possession of household and communication items. In other words the relatively high chi-square value is a fair probability for this particular data set. Apparently a more explicit relationship exist between poor and non-poor families as chi-square values are much higher (see tables 2-3).

Significant differences were also found between Blacks and Whites when race was controlled; with Black showing the lower quality of life, regardless of socio-economic situation. Three-fourths or 78.8% of Black families had low quality of life indexes compared to better than half (61.5%) of White families in the poverty cycled categories. As expected a higher percentage of the escaped poverty families, both Black and White, had higher quality of life indexes (see tables 4 and 5). On the other hand when race was controlled for poor and non-poor families, the relationships appeared to be much more stronger as chi-square values indicate (see tables 6 and 7).

While the results of this study appears to indicate that the possession and non-possession of physical assets are important factors in determining one's quality of life, it is also clear that poverty histories of families

TABLE 2

COMPARISON OF THE QUALITY OF LIFE OF THE POOR AND NONPOOR

Index	Poor	Nonpoor	Number(N)
	(Percent)		
Low	62.6	16.9	209
Medium	32.6	36.5	259
High	4.8	46.6	262
Total	100.00 (N = 187)	100.00 (N = 543)	730

$X^2 = 169.36$, df = 2, P < .000.

TABLE 3

COMPARISON OF THE QUALITY OF LIFE OF THE POVERTY CYCLED AND ESCAPED POVERTY, ALL FAMILIES

Index	Poverty Cycled	Escaped Poverty	Number(N)
	(Percent)		
Low	76.8	34.5	126
Medium	21.4	47.4	79
High	1.8	18.1	23
Total	100.00 (N = 112)	100.00 (N = 116)	228

$X^2 = 44.59$, df = 2, P < .000.

TABLE 4

COMPARISON OF THE QUALITY OF LIFE OF POVERTY CYCLED AND ESCAPED POVERTY, BLACK FAMILIES

Index	Poverty Cycled	Escaped Poverty	Number(N)
	(Percent)		
Low	78.8	41.5	112
Medium	20.2	47.6	59
High	1.0	11.0	10
Total	100.00 (N = 99)	100.00 (N = 82)	181

$X^2 = 28.45$, df = 2, $P < .0098$.

TABLE 5

COMPARISON OF THE QUALITY OF LIFE OF POVERTY CYCLED AND ESCAPED POVERTY, WHITE FAMILIES

Index	Poverty Cycled	Escaped Poverty	Number(N)
	(Percent)		
Low	61.5	17.6	14
Medium	30.8	47.1	20
High	7.7	35.3	13
Total	100.00 (N = 13)	100.00 (N = 34)	47

$X^2 = 9.25$, df = 2, $P < .0000$.

TABLE 6

COMPARISON OF THE QUALITY OF LIFE OF POOR AND NONPOOR, BLACK FAMILIES

Index	Poor	Nonpoor	Number(N)
	(Percent)		
Low	69.9	40.2	178
Medium	29.5	41.3	121
High	.7	18.5	36
Total	100.00 (N = 146)	100.00 (N = 189)	335

$\chi^2 = 41.19$, df = 2, $P < .0000$.

TABLE 7

COMPARISON OF THE QUALITY OF LIFE OF POOR AND NONPOOR, WHITE FAMILIES

Index	Poor	Nonpoor	Number(N)
	(Percent)		
Low	36.6	4.5	31
Medium	43.9	33.9	138
High	19.5	61.6	226
Total	100.00 (N = 41)	100.00 (N = 354)	395

$\chi^2 = 60.55$, df = 2, $P < .0000$.

are important as well. Review of the data in tables 2-7 generally supports this concept.

Discussion

The evidence from our study of heads of households of the rural poor in nineteen selected counties in Middle Georgia strongly suggest that objective measurements of physical assets (normal household possessions) represent something real as the authors believed. Three important factors were delineated from these data. They are: (1) a majority of the poor and poverty cycled families have a low QOL index, (2) when comparing the poor with the non-poor we find that very little difference (3.9 percent) exist between these two groups at the medium level on the QOL index; however, a difference of (26 percent) exist between the poverty cycled and escaped poverty families, which can be explained by the economic situation of the "escaped poverty" families. We feel that this is partly attributable to the fact that in Middle Georgia many "poor families" have 235-homes, which means that a proportional amount of families would have an average number of the household and communication items in the scale. This was not the case for many of the poverty cycled families, and (3) comparing the poor and non-poor with race controlled, these data tend to support the notion that white families may be better off than black families even in similar economic situation.

These findings (i.e., the direct relationship between physical assets and economic situation) may be consistent with other findings, however, the basic question that may come to mind is one that perhaps was raised by the investigators: Is there a composite set of variables that combine the subjective items with the objective ones to measure the maximum utility of quality of life." Campbell (1977) "indicates that groups of academics are looking for the one right set of indicators which will tell us what the quality of life in this country is and whether it is improving or deteriorating". ...The problem appears to be, not necessarily one of definition, but one of measurement.

While we are optimistic that the basic character and assessment in this paper is of worth and relevance to quality of life research, we reiterate here that what we have gained is knowledge on possession of physical household assets and economic situation of families in Middle Georgia. We do suggest however, that comparisons similar to ours in other areas of Georgia and the Southern Region in general, may provide more evidence to the potential of this approach.

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SESSION F

OCCUPATIONS AND WORK

TRAVEL TO WORK PATTERNS AMONG MALE AND FEMALE RURAL RESIDENTS, Clifton D. Bryant, Charles J. Dudley and Donald J. Shoemaker, Virginia Polytechnic Institute and State University.

SOCIAL DETERMINANTS OF RURAL YOUTH IN THE SELECTION OF AGRICULTURALLY-RELATED OCCUPATIONS IN ARKANSAS, Shirley M. Callaway, University of Arkansas at Pine Bluff.

CHARACTERISTICS OF BEGINNING FARMERS IN THE NORTH CENTRAL REGION: A LONGITUDINAL VIEW OF GOALS AND PROBLEMS, John P. Smith, William Heffernan and Gary V. Cole, University of Missouri.

DISTANCE TO WORK, MAJOR OCCUPATION, AND SEX OF RESPONDENTS: A STUDY OF FOUR RURAL COUNTIES *

Clifton D. Bryant **
Charles J. Dudley **
Donald J. Shoemaker **
Virginia Polytechnic Institute and State University

Introduction

In recent years a number of studies have focused on the changes occurring in the agricultural and labor structure of rural America (Coughenour, 1977; Ellis, 1975; Heffernan and Lasley, 1978). Basically these studies indicate a definite shift away from farm and agricultural occupations in rural locations. At the same time, there is developing in the United States what is sometimes referred to as a "counter-urbanization" phenomenon. That is to say, over the last few years, there has occurred in this country a population shift away from metropolitan areas and toward non-metropolitan areas.

The implications of these recent changes in rural America suggest that the rural social systems, including the behavior and attitudes of rural dwellers, are becoming similar to urban social systems. This conjecture, however, needs to be documented and researched more thoroughly in order to be accepted.

This report is based on data derived from a larger study of work patterns in four rural counties of Virginia. An earlier report from this study (Bryant, et al., 1979) indicated that the occupational structure in these four counties had become considerably diversified over the past forty years. In particular, farming had become a secondary occupation, accounting for less than only 10 percent of the major occupational force in all four counties combined. Additionally, this preliminary investigation revealed that fully one-third of the respondents had at least two income-producing occupations. These findings led to the general impression that, indeed, the rural picture of late 20th-century America is assuming heretofore "urban" tones. In effect, "the man from American Gothic...has joined the rural rat race" (p. 9).

There are, of course, numerous other work and occupational dimensions along which rural life patterns may be described relative to urban configurations. One such dimension concerns travel to work.

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** Authors listed alphabetically and not according to major or minor input to the paper.

With respect to urban areas, the literature on travel to work patterns is contradictory. In general, ecology theory would predict that the more valued residence locations would be more easily obtained by upper-status residents (Guest, 1976). On the assumption that most of this highly valued land would be located in the less densely populated areas outside of the CBD's of urban areas, it is postulated that upper-status urban workers travel greater distances to work than lower-status workers. On the whole, this prediction has been supported (Guest, 1976), but the relationship is far from being clear-cut. For example, the relationship between distance travelled to work and occupational status is influenced by such factors as measurement of occupation and distance, age and type of metropolitan area, transportation costs and systems in metropolitan areas, race of worker, and sex of worker (Reeder, 1956; McKay, 1973; Guest, 1976). The variable of sex in relation to distance to work is a particularly interesting one to consider at this time, given the increased participation of females in the labor force over the past two or three decades and the general development of an inflationary economy.

With respect to distance to work patterns in rural areas, the literature is virtually silent. It may be hypothesized that the mechanical solidarity and localistic living arrangements of non-metropolitan areas, a la Durkheim, would generate closer distances between places of residence and work, among all occupational statuses (Walker, 1977). The assumption of a purely mechanical social structure in rural areas, of course, has been challenged. The relative lack of a relationship between occupational status and distance travelled to work, therefore, remains an hypothesis much in need of systematic investigation.

The purpose of this paper is to present an analysis of the relationships between distance travelled to work, occupational status, and sex of respondent in rural areas. Because the literature in this field is both contradictory and presumptive, the findings will be presented in an exploratory manner, rather than in hypothesis-testing fashion.

Sampling and Methodological Procedures

Respondents for this study were selected on the basis of a stratified random sampling design (Kish, 1965). Four counties were selected by the authors for inclusion in the study according to two major criteria: (1) the absence of a municipality with a population of 2,500 or more and (2) regional representation, as defined by geographical location in or near one of several distinct sections of Virginia, including the "boot" section of southwestern Virginia, the centrally located "Piedmont" section, the Chesapeake area, and the northern Shenandoah Valley area.

During initial visits with county agents, county road maps were obtained and the county's residential dwellings were sectioned and numbered. The enumeration of residences involved a variety of procedures: (1) riding along county roads with the agent and recording his house count estimates as we went along; (2) riding along roads and house counting by actual sitings; (3) consulting county commissioned dwellings and business maps; and (4) consulting local post offices (where we were often just behind the census enumerators).

The goal in each county was to interview the head of the household or his/her spouse in approximately 150 households in each county. Six interviewers were instructed to randomly select a house on a road in their assigned area and to systematically select subsequent houses from the remainder on the road. The proportion guiding the systematic selection process varied from county to county from 1/12, to 1/20, to 1/13, to 1/10. If a "respondent" was not home, the interviewer was instructed to make one return visit. If there was a refusal or if no one was found at home after the second visit, the interviewer was instructed to alternately contact the next house down from or the first house previous to the rejected house and to proceed with the systematic selection from that point.

The interview instrument required approximately 30-45 minutes to administer and contained questions on a wide variety of topics concerning the demographic, major occupational, and secondary occupational characteristics of the respondents and their spouses and families. Of particular interest to the subject of this report are the questions relative to the respondents', and their families', job locations, estimated time and distance travelled to work (one-way), and mode of transportation (such as private car, public carrier, by foot, and so on). These questions were addressed to the major occupation, and all secondary occupations, of the respondent and the respondent's spouse, plus any other child living with the family who was employed.

For the purposes of this report, only the estimates of the distance travelled to the major occupation of the respondents will be included in the analysis. Analyses of other aspects of the "journey to work," so to speak, will be presented in future reports of this project.

Findings

The data in Table 1 indicate that the median distance travelled to work among the total sample was about five miles round trip, with a range from 0 to 198 miles (21 cases). The relatively short median distance travelled to work most probably reflects the rural nature of the counties surveyed.

Examination of distance travelled to work by sex of respondent and type of occupation yields some interesting results. As the figures in Table 2 display, males are considerably more mobile in travel to work patterns than the females. Specifically, over half of the males in the sample travelled over 20 miles roundtrip to their major occupation, and nearly two-thirds of the females travelled no more than 10 miles roundtrip. This finding is in agreement with earlier studies of travel to work distances in urban areas which suggest that any patterns which may be observed are more likely to be evident among males than females (Guest, 1976). Largely, the reasoning used to explain this finding is based on the more home and family-oriented role of the female in American society, even in the seventies.

Our analysis regarding the relationship between distance travelled to work and type of major occupation is presented in Table 3. Type of major occupation was categorized according to Guest's (1976) recent study of travel to work patterns in several urban localities. In general, the occupations were divided into upper-middle, middle-, and working/lower-class statuses. A detailed listing of the occupational classification is provided in Table 3. Because of the rural nature of the counties surveyed in this report, farming occupations were included in the analysis, whereas these types of occupations were excluded in Guest's study, and are excluded in urban occupational studies in general.

Additionally, for the present analysis, private household workers, including housewives, are excluded. Private household workers were excluded because preliminary analysis indicated: (a) they were overwhelmingly working close to home and (b) they were virtually all female. Including these workers in distance travelled analyses would, therefore, tend to distort the patterns for the rest of the female workers.

From the analysis presented in Table 3, it is clear that a slight, but significant, relationship exists between distance travelled to work and type of occupation. Specifically, the upper-status workers reported travelling smaller distances to work than middle- and lower-status workers. This finding is in disagreement with the hypotheses presented earlier. It is contrary to the general expectation of upper-status workers in urban areas travelling greater distances to work than other workers. It is also nonsupportive, however, of the assumption that travel to work patterns in rural areas would be similar across occupational statuses.

From the data presented in Tables 2 and 3, it is clear that there is both a sexual and an occupational effect on distance to work. The figures in Tables 4 and 5 represent a preliminary attempt to sort out the relative influence of these two variables on distance travelled to work. In Table 4, the relationship between distance travelled and major occupation is computed while controlling for sex. In Table 5, the relationship between distance travelled and sex is computed while controlling for major occupation.

Examination of both Tables 4 and 5 clearly indicates that the influence of sex is greater than the influence of major occupation on distance travelled. For example, the original relationship between distance and major occupation was increased when sex of respondent was introduced as a control variable (Table 4). By contrast, the original relationship between distance and sex remained virtually the same when major occupation was introduced as a control (Table 5).

Closer examination of Table 4 reveals that the strength of the relationship between distance travelled to work and major occupation depends solely on males. That is, the previously-mentioned tendency of upper-status workers to travel less distance to work than middle- and lower-status workers is found only among males. Among females, there is a slight tendency for lower-status workers to travel less distance than upper-status workers, although the relationship is negligible.

When the data in Table 5 are examined more closely, it becomes apparent that the original relationship between distance travelled and sex is more pronounced for lower-status occupations, somewhat evident for middle-status occupations, and virtually non-existent among upper-status workers. Specifically, the lower- and middle-status males are travelling much greater distances to work than lower- and middle-status females. Furthermore, it should be remembered that in all cases, the females are employed in work other than private household.

Conclusions

The overriding conclusion of this paper is that rural male workers travel greater distances to work than rural female workers, even excluding private household occupations. This relationship is particularly true among middle- and lower-status workers. Another important finding of this study is that upper-status workers, particularly males, travel less distance to work than middle- or lower-status workers.

Put into a broader rural-urban comparative perspective, these fingings are both supportive of and contrary to the general assumption that rural areas are becoming more like urban areas in sociocultural lifestyle patterns; probably they are. The process of rural-urban amalgamation, however, is discontinuous. With respect to distance travelled to work patterns among females, the findings of this research are in agreement with the results of previous studies in urban locales. Typically, women in American society do not travel to work over distances as great as men travel, whether they are urban or rural females. Had private household workers been included in this study, this observed relationship would have been even more pronounced. It should be remembered that these findings emerged from data collected in 1979, thus presumably reflecting increased female participation in the labor force.

On the other hand, the results of this study do not confirm the observed urban pattern of upper-status workers, especially among males, travelling greater distances to work than middle- or lower-status males, although this relationship is admittedly inconsistent and qualified beyond the sexual status of the worker. Two observations seem pertinent on this point, both of which are in need of substantially more investigation. First, the data in this paper reveal that both lower- and middle-status employees are travelling greater distances to work than upper-status workers. Perhaps this finding reflects a trend in continuation of the past urban migration of the rural migrant, the "hillbilly," to include the commuting of lower-, and now middle-, level workers between rural homes and urban factories and offices.

Second, the fact that upper-status workers are the one who are staying relatively close to home in their jobs may be an indication of the existence of a predominantly "local," versus "cosmopolitan," pattern of social power and influence (Merton, 1957:X) in rural areas.

The seeming "commitment" of lower- and middle-status male workers to their local rural areas may, on the one hand, represent a genuine preference for certain advantages and benefits attendant to lifestyle in the rural setting. These advantages and benefits might include lower cost of renting or buying a home, lower taxes, fewer legal constraints on lifestyle (less restrictive zoning ordinances, for example), more privacy, and availability of certain services at lower cost than in urban areas, to name some. This "commitment" may well also suggest a genuine attachment for the more gemeinschaft social context of the rural area with the constituent primary relationship and linkages with neighbors, family, and kinsmen. On the other hand, the seeming "commitment" may be essentially a rationalization of a basic economic dilemma--the necessity of living in a "low rent district," as it were, but having to seek employment in a distant town. In effect, the lower- and middle-status male worker may be in the economic bind of having to live in a rural area because of economic considerations (being able to live in a mobile home outside of the city, for example) but at the same time, not being able to find employment in the local area that would yield a living wage. Thus, the need to commute long distances to work because of economic circumstances. On the other hand, such workers may simply rationalize such a situation in non-economic terms as a "commitment" to the rural residential area and life style.

The upper-status workers enjoy no such dilemma. Presumeably they are better able to select their area of residence without undue regard for economic considerations, and are often able to identify suitable employment nearby. A typical example might be the professional who works in a suburban area and accomplishes to live relatively close by in a rural area--the physician, attorney, or executive who owns the house in the rural area and thereby becomes the "country squire." Such a person may better demonstrate a true "commitment" to the rural area and bucolic life style inasmuch as the residential pattern results from genuine choice not economic necessity.

In any event, the rising cost of fuel, and thus commuting, may well soon reveal the truth concerning the lower- and middle-status worker. At some point, the cost of commuting the longer distance will become prohibitive and such individuals may discover that the economic advantages of rural residence are offset by the cost of travel to work. At this point, they may well succumb to the new economic pressures and return to the cities to live, at the expense of pastoral life style and the satisfactions of a primary social relation network.

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Table 1. Mean, Median, and Range of Distance (One-Way) Travelled to Major Occupation, Respondents Only.

Mean = 15.6 miles

Median = 2.5 miles

Range = 0 miles to over 99 miles

Table 2. Distance Travelled to Major Occupation by Sex (percent in parentheses)

	Sex	
Distance (miles)	Male	Female
0-5	85 (35.3)	110 (60.4)
6-10	25 (10.4)	22 (12.1)
11+	131 (54.4)	50 (27.5)
Totals	241	182

Tau C = -.283, p < .001

Gamma = -.462

Table 3. Distance Travelled to Major Occupation by Major Occupation (percent in parentheses)

	Major Occupation*		
Distance (miles)	1	2	3
0-5	44 (46.3)	32 (29.1)	39 (38.6)
6-10	16 (16.8)	16 (14.5)	8 (7.9)
11 +	35 (36.8)	62 (56.4)	54 (53.5)
Totals	95	110	101

Tau C = .092, $p < .03$.

Gamma = .152

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* 1 = Professional, technical, and kindred; managers/administrators except farm; and farmers and farm managers.

2 = Sales workers, clerical and kindred workers; and craftsmen and kindred workers.

3 = Operatives, except transport; transport equipment operatives; laborers, except farm; farm laborers and farm foremen; and service workers, except private household.

This classification of major occupational titles is also utilized in Tables 4 and 5.

Table 4. Distance Travelled to Major Occupation by Major Occupation, Controlling for Sex (percent in parentheses)

Males

Distance (miles)	Major Occupation 1	Major Occupation 2	Major Occupation 3
0-5	31 (47.7)	20 (26.0)	22 (32.4)
6-10	10 (15.4)	9 (40.9)	3 (4.4)
11 +	24 (36.9)	48 (62.3)	43 (63.2)
Totals	65	77	68

Tau C = .156, p < .004.

Gamma = .269

Females

Distance (miles)	Major Occupation 1	Major Occupation 2	Major Occupation 3
0-5	13 (43.3)	12 (36.4)	17 (51.5)
6-10	6 (20.0)	7 (21.2)	5 (15.2)
11 +	11 (36.7)	14 (42.4)	11 (33.3)
Totals	30	33	33

Tau C = -.049, n.s.

Gamma = -.078

Zero-Order Gamma = .152
1st Order Partial Gamma = .205

Table 5. Distance Travelled to Major Occupation by Sex, Controlling for Major Occupation (percent in parentheses)

	Occupation 1	
Distance (miles)	Males	Females
0-5	31 (47.7)	13 (43.3)
6-10	10 (15.4)	6 (20.0)
11 +	24 (36.9)	11 (36.7)
Totals	65	30

Tau C = .023, n.s.
Gamma = .042

	Occupation 2	
Distance (miles)	Males	Females
0-5	20 (26.0)	12 (36.4)
6-10	9 (11.7)	7 (21.2)
11 +	48 (62.3)	14 (42.4)
Totals	77	33

Tau C = .157, p < .04
Gamma = -.303

	Occupation 3	
Distance (miles)	Males	Females
0-5	22 (32.4)	17 (51.5)
6-10	3 (4.4)	5 (15.2)
11 +	43 (63.2)	11 (33.3)
Totals	68	33

Tau C = -.240, p < .006
Gamma = -.443

Zero-Order Gamma = -.246
1st-Order Partial Gamma = -.248

OCCUPATIONAL KNOWLEDGE, ASPIRATIONS, AND EXPECTATIONS OF HIGH SCHOOL SENIORS IN REGARD TO SELECTED AGRICULTURALLY-RELATED OCCUPATIONS

Shirley M. Callaway, David Houston, and Donald Voth*
Department of Agriculture
University of Arkansas, Pine Bluff

Each year, thousands of young people are faced with choosing a career within our affluent society. They are expected to select a career based simply on individual preference with little thought to compentencies for a particular job. Concurrently, these youths possess little or no preparation in decision-making skills and know little about opportunities in various occupations. This can be a confusing and costly task which may affect them throughtout life.

Some young people are successful in making wise career choices while others are not as fortunate, especially rural youth who might be unaware of various occupations which could fit their acquired skills or potentials. Many rural schools do not include occupational counseling as part of their high school curricula. As a result, many do not have a broad spectrum of careers to select from. Thus, the need to investigate whether youth are aware of the choices available to them is evident.

Technological advancements in agriculturally-related industries in our society have blossomed tremendously within the last two decades. This expansion has produced new and challenging career opportunities for rural youth. There are numerous new jobs available in agriculture and in industries that support agriculture. Each year there are an estimated two thousand job opportunities for scientists and educators in both new and old career areas. In order to determine if high school seniors are pursuing agriculturally-related careers, this study focuses on the familiarity (knowledge) rural high school seniors have with regard to agricultural and nonagricultural occupations and their aspirations, and expectations in relation to these occupations.

METHODOLOGY

For the purpose of clarity, certain terms used in this study are defined as follows:

Rural High Schools - consist of all schools with a student population less than 260 in grades 9-12.

Aspiration - the desire or wish to accomplish a certain goal; desire to achieve selected occupations.

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*Dr. Donald Voth is an Associate Professor in Rural Sociology. University of Arkansas, Fayetteville, Arkansas.

Expectation	- the goal one feels that he can actually accomplish or attain; feelings of expecting to achieve selected occupations.
Knowledge	- awareness and acquaintance with facts; familiarity with selected occupations.

The data in this study were obtained from questionnaires that were mailed to 5 rural schools in Arkansas (Lakeview, Bergman, Crawfordsville, Monette, and Fountain Hill) and distributed to rural high school seniors, with the assistance of vocational-agriculture teachers. Of the 130 questionnaires distributed to seniors, 118 were obtained from rural high school seniors, which represented a response rate of 91 percent.

In order to determine the knowledge, aspirations, and expectations of rural high school seniors in regard to agriculturally-related occupations, seventy-five (75) agricultural occupations[1] were purposely selected from a listing in the Dictionary of Occupational Titles to represent a crossection of lower and higher level occupations. Additionally, nine (9) nonagricultural occupations were included for comparison used in Crosby and Frank's (1978) study where they indicated that these occupations were selected from the original NORC list, taking every ninth position from that scale. They planned that these nine NORC occupations would provide a means of transforming the agricultural occupations' scores into "standardized" NORC values. Finally, "housewife" was included to estimate the prestige attached to this quasi occupational title.[2]

The questionnaire consisted of:

(1) A knowledge component was used to measure the knowledge (familiarity) of rural high school seniors in regard to selected occupations.[3]

(2) An aspiration component was used to determine the aspirations of seniors for the occupations studied.[4]

(3) An expectation component was used to determine the seniors' expectations of achieving these occupations.[4]

Mean values were calculated for each of the occupations for the various questions dealing with knowledge, aspirations, and expectations. The values were then ranked and the analysis of these data involved comparing the rankings of agricultural (professional, technical and managerial occupations; farming, fish and wildlife, forestry and related occupations); nonagricultural occupations and rankings of different subgroups of occupations (using median ranks for subgroups). Differences were said to exist in the anlaysis of the median ranks if values differed by more than five (5) units.

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[1] List of the occupations will be supplied by the authors upon request.

[2] Nonagricultural occupations were selected from Crosby and Frank's (1978) study on a Prestige Scale of Agricultural Occupations.

[3] The knowledge component consisted of three responses: (3) very familiar, (2) somewhat familiar, and (3) never heard of it.

[4] The aspiration and expectation components consisted of three responses: (3) very much, (2) slightly, and (1) not at all.

The hypothesis was tested using the Pearson Correlation Procedure to test the association between knowledge and aspirations of rural high school seniors.[5]

REVIEW OF LITERATURE

Burchinal, Haller, and Taves (1962) indicated that occupational choices are reflected by an individual's social and personal development. These choices are based on tentative occupational choices which are later derived through occupational role-taking. Also, occupational choices are determined through individual experiences and resources that are available to them, such as knowledge of occupational opportunities, the training required to attain these occupations, financial and nonmonetary resources preference, and personality characteristics. He also emphasized that the development of the occupational role-taking process is attributed to the influences of family members, school experiences, and peer groups.

Haller, Burchinal, and Taves (1963) indicated that as a whole the average rural youth is somewhat less equipped for successful entry into the occupational world than urban youth. He also pointed out that the occupational aspirations and desire of rural youth to attend college were lower than their counterparts.

Gregg and Middleton (1959) reported that a positive relationship existed between the community size and occupational aspiration. This relationship continued to exist even though various other variables were accounted for, such as intelligence scores, occupation scores, and the occupation of the father.

Slocum (1956) studied the occupational and educational plans of high school seniors from farm and nonfarm homes. He found that family values were an important factor in their occupational and educational plans. Additionally, a strong relationship exists between the educational level of the parents and educational plans of the youth. Approximately seven out of ten respondents whose father attended college had plans of attending college compared to three out of ten whose parents only completed the eighth grade. It was also pointed out that the lower the educational level of the father the more likely youth had plans of entering the labor force immediately which meant that his plans would be uncertain. The same relationship existed between the mother and the respondents.

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[5] Hypothesis listed in the Results.

Kulesky and Bealer (1966) indicated that it is necessary to distinguish between aspirations and expectations. "Expectation is an individual's estimation of his/her probable attainment in reference to a particular goal; i.e., what occupational plateau he/she expects to reach." Expectations should not be equated to aspirations, since an expectation need not be desired and, therefore, need not be a goal. Additionally, an expectation is an anticipated occurrence and the individual's orientation toward this expected state, which may be favorable or unfavorable.

Stephenson (1975) conducted an analysis of the occupational and educational aspirations and expectations of ninth graders. The results indicated that youth have similarly high occupational and educational aspirations regardless of race or class. However, their plans or expectations tended to be conditioned by racial or class position within the social structure.

Antonovsky and Lerner (1959) investigated racial differences in occupational aspirations. He concluded that blacks tended to have higher levels of aspirations than whites. The authors suggest that the blacks' extraordinary drive reflected by their higher aspirations may be indicative of their search for self-esteem.

Crosby and Picou (1971) concluded in the study of southern high school sophomores in testing the hypothesis that black youth have lower aspirations than white youth. The auhtor cited that in prior studies, researchers had generally supported the contention that white youth possess higher levels of occupational aspirations than black youth. White respondents did tend to exhibit higher aspirations in the initial analysis of the relationship between aspirations and race. However, in the subsequent analysis controlling for the socio-economic class, the initial relationship changed considerably. In fact, the findings suggested that within groups of respondents with similar socio-economic backgrounds, black students tended to have higher aspirations than their white counterparts.

The literature review focuses on the aspirations and expectations of youth in regard to occupations in general. This study is designed to emphasize specifically agriculturally-related occupations and their implications for youth.

RESULTS

These findings provide a descriptive analysis of the knowledge, aspirations, and expectations of rural high school seniors in regard to occupations.

OVERALL COMPARISON OF OCCUPATIONAL KNOWLEDGE, ASPIRATIONS, AND EXPECTATIONS IN REGARD TO AGRICULTURAL AND NONAGRICULTURAL OCCUPATIONS

Occupational Knowledge

The data shown in Table 1 tend to indicate that rural high school seniors were considerably more knowledgeable of nonagricultural occupations than agricultural occupations. (Median ranks of 23.0, compared to 47.5).

Among agricultural occupations, rural high school seniors were more knowledgeable about farming, fish and wildlife, forestry and related occupations than professional, technical and managerial occupations. The data in Table 1 tend to suggest that among farming, fish and wildlife, forestry and related occupational group, rural high school seniors were considerably more knowledgeable of the fish and wildlife occupations, followed by other farming, hunting, trapping, and related occupations. Rural high school seniors were least knowledgeable of plant farming occupations, forestry and related occupations.

The values shown in Table 1 indicate that among the professional, technical and managerial occupational group, rural high school seniors were more knowledgeable of occupations in medicine and health, followed by managers, officials and occupations in education. High school seniors were considerably less knowledgeable of occupations in the life and social science areas.

Occupational Aspirations

The values shown in Table 1 indicate small differences in the aspirations of rural high school seniors in regard to agricultural and nonagricultural occupations.

The data indicate that among the two agricultural occupational groups, rural high school seniors had higher aspirations for professional, technical and managerial occupations than the farming, fish and wildlife, forestry and related occupations. Rural high school seniors had the highest aspirations for agricultural professions in medicine and health, followed by employment as agricultural managers, officials and occupations in education. Rural high school seniors aspired least to professions in the life and social science areas.

Among the farming, fish and wildlife, forestry and related occupational group (shown in Table 1), rural high school seniors had higher aspirations for employment in fish and wildlife occupations, followed by other farming occupations, forestry and related occupations; i.e., hunting, trapping, etc. High school seniors had the least aspirations for plant farming, animal farming, and blight and pest control.

Occupational Expectations

The data shown in Table 1 tend to indicate that rural high school seniors have higher expectations of achieving nonagricultural occupations than agricultural occupations.

Table 1

COMPARISON OF OVERALL KNOWLEDGE, ASPIRATIONS AND EXPECTATIONS OF RURAL HIGH SCHOOL SENIORS IN REGARD TO AGRICULTURAL AND NONAGRICULTURAL OCCUPATIONS

Occupational Groups	Median Rankings		
	Knowledge	Aspirations	Expectations
1. Agricultural Occupations	47.5	42.5	44.5
A. Professional, Technical and Managerial	52.5	40.0	39.0
(1) Life Sciences	69.0	40.5	40.5
(2) Social Sciences	75.0	49.7	52.5
(3) Medicine and Health	29.0	15.0	20.5
(4) Education	44.5	56.0	24.5
(5) Managers and Company Officials	45.0	34.5	41.5
B. Farming, Fishery, Forestry and Related Occupations in Agriculture	39.5	48.0	44.0
(1) Plant Farming	44.0	57.5	47.0
(2) Miscellaneous Farming	22.0	24.5	13.6
(3) Animal Farming	35.0	52.5	48.0
(4) Hunting, Trapping and Related Occupations	45.5	42.7	28.0
(5) Blight and Pest Control	61.0	52.5	78.5
(6) Forestry and Related Occupations	55.0	35.0	43.0
(7) Fishery and Related Occupations	11.5	11.0	11.5
2. Nonagricultural Occupations	23.0	44.5	38.0

The data also suggest slight differences between the expectations of seniors in achieving professional, technical and managerial occupations and farming, fish and wildlife, forestry and related occupations.

Among professional, technical and managerial occupational group, rural high school seniors had the highest expectations of achieving careers in medicine and health professions, followed by occupations in education. Rural high school seniors had the least expectations for achieving employment as agricultural managers and company officials, and careers in the life and social sciences.

Among the farming, fish and wildlife, forestry and related occupational categories, rural high school seniors had the highest expectations of achieving careers associated with fish and wildlife and other farming occupations, followed by hunting, trapping, and related occupations, forestry and related occupations, plant farming and animal farming occupations. High school seniors had considerable less expectations for achieving careers in blight and pest control.

COMPARISON OF OCCUPATIONAL KNOWLEDGE, ASPIRATIONS, AND EXPECTATIONS BETWEEN BLACK AND WHITE SENIORS IN REGARD TO AGRICULTURAL AND NONAGRICULTURAL OCCUPATIONS

Occupational Knowledge

The data shown in Table 2 tend to indicate that both black and white respondents had a greater knowledge of nonagricultural occupations than agricultural occupations. There appeared to be little difference in knowledge of agricultural occupations between blacks and whites. However, among nonagricultural occupations, rural black seniors were relatively more knowledgeable than whites.

The data shown in Table 2 suggest that rural white seniors were more knowledgeable of farming, fish and wildlife, forestry and related occupations than blacks. However, there appeared to be no difference in the knowledge of professional, technical and managerial occupations.

Among farming, fish and wildlife, forestry and related occupations, there appeared to be differences in knowledge between black and white respondents. Rural white high school seniors were somewhat more knowledgeable of all the occupational categories within this occupational group, with the exception of plant farming and fish and wildlife.

The data shown in Table 2 tend to suggest that there were no differences in knowledge among the professional, technical and managerial occupations between blacks and whites. The exception was in occupations in the life sciences and education where rural black seniors were more knowledgeable than whites.

Occupational Aspirations

The data displayed in Table 2 indicate that small differences existed between the aspirations of black and white respondents toward agricultural

TABLE 2

COMPARISON OF KNOWLEDGE, ASPIRATIONS AND EXPECTATIONS BETWEEN BLACK AND WHITE HIGH SCHOOL SENIORS IN REGARD TO AGRICULTURAL AND NONAGRICULTURAL OCCUPATIONS

	Median Rankings					
	Knowledge		Aspirations		Expectations	
Occupational Groups	Blacks	Whites	Blacks	Whites	Blacks	Whites
1. Agricultural Occupations	47.2	46.7	44.7	44.5	45.0	43.0
A. Professional, Technical and Managerial	53.5	58.0	20.0	52.0	25.0	46.5
(1) Life Science	64.0	70.5	21.0	57.0	14.5	54.0
(2) Social Science	60.5	60.5	36.5	72.5	27.5	68.5
(3) Medicine and Health	33.0	32.5	9.0	19.0	22.0	25.0
(4) Education	39.5	48.5	22.5	43.0	16.5	40.5
(5) Managers and Company Officials	47.5	52.0	16.5	54.0	34.5	52.5
B. Farming, Fishing, Forestry and Related Occupations in Agriculture	46.0	34.0	57.0	40.5	55.5	40.5
(1) Plant Farming	46.0	44.5	57.0	45.0	50.5	40.5
(2) Miscellaneous Farming	40.0	14.0	54.0	21.0	55.5	14.0
(3) Animal Farming	38.0	27.5	65.5	42.0	58.5	54.0
(4) Hunting, Trapping and Related Occupations	46.5	42.5	66.5	24.0	55.0	20.5
(5) Blight and Pest Control	62.0	54.0	47.0	46.0	66.0	58.0
(6) Forestry and Related Occupations	41.5	62.0	27.0	37.0	55.5	43.0
(7) Fishery and Related Occupations	15.0	9.5	58.5	60.0	58.5	4.0
2. Nonagricultural Occupations	16.0	22.0	35.0	43.0	13.0	49.0

and nonagricultural occupations. Black seniors had greater aspirations for nonagricultural occupations.

Among the professional, technical and managerial occupations and the farming, fish and wildlife, forestry and related occupations, there were considerable differences between black and white respondents. For instance, rural white seniors had higher aspirations for farming, fish and wildlife, forestry and related occupations than blacks; whereas, rural black seniors had higher aspirations for employment in the professional, technical and managerial occupations than whites.

The data displayed in Table 2 also suggest that rural black seniors had considerably higher aspirations for all occupational categories within the professional, technical and managerial occupations than their white counterparts.

Occupational Expectations

The data shown in Table 2 indicate small differences between whites and blacks in their expectations of achieving agricultural and nonagricultural occupations. Rural blacks had considerably higher expectations of achieving nonagricultural occupations than whites.

Among the two major categories of agricultural occupations, rural black seniors had higher expectations of achieving occupations within the professional, technical and managerial profession; whereas, rural whites had higher expectations of achieving occupations within farming, fish and wildlife, forestry and related professions.

The data further suggest considerable expectation differences between blacks and whites among the farming, fish and wildlife, forestry and related occupations. For instance, rural white seniors had higher expectations for employment in plant farming and other farming occupations, hunting, trapping, etc., fish and wildlife than blacks. However, there were small differences among the remaining occupational categories.

HYPOTHESIS

Rural youth who have a greater knowledge of agriculturally-related occupations will have higher aspirations and expectations in regard to these occupations than rural youth with less knowledge.

In testing the hypothesis, the data indicated that there was no significant correlation between knowledge and aspirations of high school seniors. The data further suggest that there were no significant correlations between knowledge and expectations of high school seniors.

SUMMARY

1. Rural high school seniors had greater knowledge of nonagricultural occupations than agricultural occupations.

2. They also had higher expectations of achieving nonagricultural occupations.

3. There were no significant differences in their aspirations in regard to agricultural and nonagricultural occupations.

4. The findings further tend to indicate considerable differences between blacks and whites relative to knowledge of aspirations and expectations of nonagricultural occupations.

5. There were no significant differences between blacks and whites in regard to knowledge, aspirations, and expectations of agricultural occupations.

6. The data tend to indicate that among the two major categories of agricultural occupations, rural high school seniors were more knowledgeable of farming, fish and wildlife and related occupations than professional, technical and managerial occupations.

7. Rural white students were more knowledgeable of farming, fish and wildlife, forestry and related occupations than black students.

8. Blacks were more knowledgeable of professional, technical and managerial occupations than whites.

9. Data tend to suggest that rural high school seniors had higher aspirations for professional, technical and managerial occupations than farming, fishing, forestry and related occupations.

10. Rural black seniors had relatively higher aspirations for professional, technical and managerial occupations than white seniors who held relatively greater aspirations for farming, fish and wildlife, forestry and related occupations.

11. There were no significant differences in rural high school seniors' expectations of achieving these occupations. However, there were differences between blacks and whites. That is, rural white seniors had higher expectations of achieving farming, fish and wildlife, forestry and related occupations; whereas, rural black seniors had higher expectations of achieving professional, technical and managerial occupations.

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Characteristics of Beginning Farmers in the North-Central Region

by

John P. Smith, North Dakota State University
William D. Heffernan, University of Missouri-Columbia
Gary V. Cole, North Dakota State University

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Introduction

The average age of farmers in this country in 1974 was 52 years, with 17 percent of the operators over 65 years of age, and 27 percent of the farmers between 55 and 64 years of age (Census of Agriculture, 1974). This suggests that the operators of many of these farms, if not the ownership, will change in the next ten to fifteen years. The question is, who will operate these farms in the future? In past years, the new operators were usually neighbor-farmers who purchased or leased the farm, thereby enlarging their own farm operations. Most of the farmers who have retired in the past had relatively smaller farm units which were combined with units of their neighbors who were younger and who were aggressively expanding their operations. In the Midwest, often a retired farmer's 160 acres or 240 acres would be combined with an operation of perhaps 700 or 800 acres. But those who will be retiring in the next decade are the larger, aggressive farmers who have been intent upon enlarging their farms. These enlarged farm units, plus the rapid increase in the price of land, equipment and livestock, means that many farms today have values in excess of a million dollars. The question is, who will purchase and operate these large units when the current owner-operators retire?

In the United States today, the segment of agriculture which produces seventy-five percent of the food and fiber is capital-intensive agriculture. Since 1967, the price of farmland has more than doubled throughout the United States and, in some areas, the price of farmland has tripled or even quadrupled. Most agricultural economists today suggest that the price of farmland is one-third to one-half higher than justified by the income from the sale of agricultural products. The cost of farm equipment has risen rapidly, due, in part, to its increased size and sophistication. As a result of increased petroleum prices, the cost of fertilizer has also increased at the same time that its use per acre has increased. In addition, innovations such as insecticides and herbicides (not even used ten or twenty years ago) are increasing rapidly. Thus, capital requirements for both land and operating costs have greatly increased.

Hopkins (1970) indicated that prior to 1950, 85 percent of the capital for agriculture came from retained farm earnings, but since then, retained farm earnings have become an increasingly inadequate source of capital. Most of our current farmers (certainly those who are in their mid-fifties and older) started farming at a period in history when retained farm earnings would provide adequate capital for financing their farms. Once started, the farmers could use some of the income generated from their land purchased at lower price to help pay the price of new, higher priced land. This pattern of financing new land purchases is still occurring. But what is the source of capital for farmers entering today, or ten years from now, who do not have an established capital base?

The combining of the relatively smaller farms (which may now be valued at a million dollars) of retiring farmers with the larger farming operations cannot go on forever unless other forms of agriculture structures are established which are able to concentrate millions or billions of dollars. Another possible outcome is the dividing of the large units into small units which families can finance. Nichols, et al. (1979), report that small farms, defined as 50 acres or less, are increasing in the Midwest. Although units of less than 50 acres are important sociologically, they currently produce a relatively small proportion of the agricultural output. This could, of course, be changed.

The recent "Dialogue on the Structure of Agriculture" initiated by Secretary Bergland, placed much emphasis on the issue of entry into agriculture. One of the issue papers prepared by members of the staff of USDA (J.B. Penn, 1979:18), listed five main obstacles faced by young farmers as they enter and get established in farming. The obstacles listed are:

1) Entry fixed to departure rate because of the availability of land.
2) High cost of machinery and equipment.
3) Rising land costs.
4) Lack of income during entrance, and during early years as an operator.
5) Competition for farm land from non-farm investors.

Except for the first, the need for capital underlies all of these obstacles. (It is not surprising that a Marxian perspective serves as the major theoretical anchor for many rural sociologists who have recently attempted to analyze the political economy of agriculture.)

Wright (1943) and several rural sociologists (Smith, 1953; Nelson, 1955) writing prior to 1960 indicated that throughout the twenties, thirties, and forties, the "agricultural ladder" seemed to prevail. Many studies of farm entry keyed on this ladder. Youth worked on the farm developing their skills and abilities under their father's scrutiny. As they grew older, they began to work as hired hands for either their father or someone else in the community until they were able to secure a very limited amount of capital. At this time they became tenants and leased land (and sometimes livestock) from either family members or others in the community and began developing a reputation as farmers. After several years, the tenants were able to develop sufficient capital (very limited by comparison with today's requirements) to become full owner-operators. Because retained farm earnings no longer provide sufficient capital for financing the farming operation, however, this agricultural ladder concept no longer applies. Today, nonfarm income has become a major alternative for generating capital for those agricultural structures which maintain most of the characteristics of the family farm structure.

Drawing from a number of dissertations and experiment station bulletins from the 1940's to the present, this paper will make some historical comparisons between the characteristics of beginning farmers and by noting those characteristics, make some inferences as to how the problems faced by beginning farmers have changed. Although the studies are statistically and methodologically diverse, they do give some indication of trends. The second part of the analysis will examine some of the goals of beginning farmers; such data were not included in earlier studies. Although it cannot take the place of a well designed longitudinal study, our effort to describe the characteristics of beginning farmers and to compare younger farmers with older farmers will allow some prediction.

Research on Farm Entry: Up to 1975

The theme of the agricultural ladder prevailed in much of the pre-World War II literature. From the 1920's to 1940, most studies reported that the number of farm youth who farmed away from home as laborers for a specific wage considerably exceeded the number of those working for wages on the home farm (Wright, 1943); more were selling their labor away from home than were working as partners on the family farm. Most studies, according to Wright, showed that from ten to twenty percent of the boys who farmed at home did so for a fixed allowance. An approximately equal number had income from one or more personally owned farm enterprises on the family farm.

The role of the family continued to be the focus of most later studies, even after the demise of the "agricultural ladder." Martinson (1970) discussed a number of the modes by which the family assists beginning farmers. In his follow-up study of a 1957 cohort, he found that the process of becoming established in farming is long and complex, requiring help from the family both in the beginning and thereafter (e.g., free use of land, financial aid, etc.). Bjoraker (1970) noted that part time farming has provided some opportunity for farmers to get established but that it has not proven to be a successful substitute for family sponsorship as a means of farm entry. Phipps (1953) surveyed new farmers in Illinois and found that 88 percent used their own savings to start in farming, but that 58 percent still received help from the family. Ahalt (1956) indicated that the first step into farming was a father-son partnership (73 percent). He also found that 88 percent of his sample continued to be aided by the family after the first year.

Edmond (1960) concentrated on the role of the family as well as on increased need for management skills. His dissertation was based on data from a random sample of townships in Missouri and Iowa. In 224 townships, 175 new farmers were left of the 190 that had started two years prior. He found that entry into farming was a family process; about two-thirds of the beginning farmers had direct help the first year and 56.5 percent continued to receive help into the third year of operation. Land owned by a parent or a relative was the single greatest source of land being farmed the first year. But after that, rented land from outside the family was acquired. Dorner (1963) concluded that those who purchase smaller tracts of land get locked too easily into smaller, low-income farms, while those who begin as renters eventually take over ownership of larger, high income farms. "Premature ownership of farm real estate under today's conditions can lead to a reduced income over the entire lifetime of the family" (Dorner and Sandretto:1).

Finally, Johnson (1975) discussed the role of the family in the rental process. Johnson notes that 38 percent of all farmland is rented and the largest (in terms of acreage) one-fifth of the operating units account for about three-fourths of the rented farmland. Johnson notes that 65 percent of farmers in the youngest age class use land rentals. In a survey of landlords in Michigan and Illinois, he found that over 40 percent were directly related to their tenants. While single year leases were the norm, many leases had been in effect for 11 to 14 seasons. Seventeen percent of all leases had been in effect for 20 years or more. He found a relatively closed system with regard to dissemination of information about availability of land. If someone hears of land available for lease, he passes the information on to family and friends; often family and social influence must be brought to bear to get a lease (Johnson:62).

Information in Figure 1 is drawn from nine different studies which have been conducted in the North-Central region, with the last study having been done by the senior author of this paper (Smith and Knudsen, 1979). The tabular format is used to summarize the characteristics of beginning farmers from the period 1953 to 1979.

(FIGURE 1 ABOUT HERE)

The Eddington (1961) study of dairy farmers was the only study that indicated a significantly older age. The information suggests that the expected trend of gradually increasing educational levels has taken place over the time period. The last two studies indicate that a couple of years of training beyond high school is becoming more common. The findings suggest that the size of the initial operation is also increasing though much of this is the result of the general size of units in North Dakota, which was the state from which the data for the last two studies was obtained. Only three of the nine studies examined off-farm income, which provides one mechanism to supplement retained farm earnings for the purpose of providing capital for the farm. The 1970 study by Martinson in Wisconsin, the 1975 study by Johnson at Wisconsin and the 1979 Smith-Knudsen study of North Dakota all indicate that over half of the beginning farmers had off-farm income. The omission of off-farm income data in the 1950's and earlier time periods might suggest that off-farm income was less important for financing new farm units at that time. In more recent years, this has become an important means of financing a farm unit.

All the literature reviewed concerning farm entry from 1940 to the present discusses the role of the family in the process of establishing new farm units. Figure 2 summarizes some of the roles of the family. Missing are two significant roles: 1) the support for education by the family; and 2) the availability and use of farm machinery by the new farmer. We should also point out that although most of these sources cited here describe the role of the family, little systematic elaboration was attempted. The information suggests that the role of the family in assisting beginning farmers has always been important and continues to be so. In the various studies conducted, it was found that over half (and in some studies, up to 90 percent) of the beginning farmers indicated they received help from their families.

(FIGURE 2 ABOUT HERE)

Present Goals for Farming: North Dakota Data

In 1979, beginning farmers in North Dakota were asked to list their goals for their farming operation. The data were obtained from a mail survey done by the North Dakota State Department of Agriculture and the University Extension Service. Of the 218 respondents, 158 filled in at least one goal and 90 listed a second goal. Data in Table 1 show the distribution of the goals mentioned first and second on the open-ended question. The goal mentioned most often was an increase in land base. Almost half (42 percent) of the beginning farmers mentioned this as their first goal and over one-fourth (29 percent) listed it as their second goal. Other goals which indicated an interest in growth of the enterprise were also mentioned; for example, general growth of the farm unit (10 percent), increased livestock (four percent), and the addition of new operations (three percent). Thus, 52 percent listed growth oriented goals first. Forty-one percent of the beginning farmers listed other goals first, such as acquiring a farm unit (13 percent), continuing farming after the father retires (two percent), self-sufficiency (5 percent), and comfortable living (four percent). Although the beginning farmers mentioned several different goals for their farm operations, the goal of controlling additional capital was most often mentioned.

(TABLE 1 ABOUT HERE)

Although a large number of younger and smaller-scale farmers did not respond to the goals item, more analysis of these goals is underway. Initial tabulations indicate that levels of education and marriage have no effect on the mention of goals, while partnership with family correlated with the goal of continuing the farm operation after the father retires. Year in which farm entry took place does seem to be correlated to growth goals, however.

Goals of Young Farm Families: Missouri Data

In 1979, all cash grain farmers (defined as those farmers having 60 percent or more of farm income derived from the cash sale of grain) who were members of the Missouri Mail-in Record Association were interviewed by telephone (see Barrett, 1979).[1] Thirty farmers met this criteria and were so interviewed. One purpose of the study was to determine the benefits that farmers receive from farming. The respondents were asked to rank eleven benefits they might receive from farming. A magnitude estimator technique was used to determine their rankings. The farmers were told that the base item was the opportunity to be one's own boss and make one's own decisions. One hundred points were assigned to this item. They were then asked to rank relative to the base item, a list of 10 other benefits which they might receive from farming. If they felt an item was twice as important as being one's own boss, they were to assign the item 200 points. If they felt the item was only half as important, they were to assign fifty points to the item. The farmers were then categorized by age (less than 40 years, 40-55 years, and over 55 years of age). Data in Table 2 compare the benefits perceived by younger farmers relative to those perceived by older farmers.

(TABLE 2 ABOUT HERE)

"Doing something worthwhile" was ranked first by members of each age category. The younger farmers ranked "can express yourself" second and "sense of security" third. In younger farmers, "being one's own boss," the base item, ranked fourth while it was ranked third by the older farmers. "Working outdoors" was ranked fifth and "provides good income" was ranked sixth by the younger farmers. The older farmers ranked "good income" fourth. The average ranking score of the young farmers for "selling through a free market" was 81, but the average ranking score for the remaining four items was less than 65. Although the income benefit was ranked rather high, the data do suggest that income and even security are not the only motivators of young farmers. They acknowledge deriving other benefits from their occupation.

Summary and Conclusions

The purpose of this paper was to review the literature on entry into agriculture by beginning farmers, to compare some of the characteristics that have been studied over a period of three decades, and to look at some of the goals currently expressed by beginning farmers. The characteristics of the beginning farmer and the role of the family in the farm entry process of the beginning farmers has been stressed in all previous studies. The great need for capitalization received little attention in the early literature but received much more treatment in recent years. Information from dissertations and experiment station reports suggest that, until relatively recently, farm ownership was a goal toward which the individual and the farm family should direct its efforts. Much farm management literature since 1975, however, emphasizes the rational management of a farm operation and farm unit expansion as the major goal. Ownership is being downplayed and the role of the family in entry sponsorship is deemed less important. A brief review of past empirical studies of entry into farming, however, calls into question the premature downgrading of the role of the family in entry sponsorship. Recent findings from North Dakota suggest that the family still is very much involved in the entry of most beginning farmers even though the beginning farmers have accepted growth and control of capital as the major farm goal.

The personal characteristics of beginning farmers appear fairly constant over time, although a growth syndrome is evident among recent beginning farmers. Because the farm goals are directed toward growth and expansion, which require capital, the family is important as a means of transferring capital and non-farm income is important as a means of obtaining non-farm generated capital. However, income generation does not appear to be an all encompassing concern for young farmers even though the emphasis is on growth and capital control as the major farm goal. Missouri data suggest that young farmers do obtain many non-economic benefits from farming. Although those who have been successful in starting their farming operations continue seeking to expand their base, the beginning farmers are seeking more than just strictly economic benefits from their chosen occupation.

FOOTNOTE

[1] North Dakota and Missouri agricultural operators present an interesting contrast. Farms in North Dakota tend to be larger, having grown larger relatively rapidly as modern technology was adopted. The farmers experience higher levels of risk resulting from the boom and bust cycle which is dependent on the weather and marketing pattern. On the other hand, Missouri is characterized by a higher proportion of small diversified farms with a more stable land ownership pattern and less land rented.

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Figure 1

BACKGROUND CHARACTERISTICS FOR BEGINNING FARMERS FROM SOURCE STUDIES (1953-1979)

	Median Age at Start	Years of Schooling	Acres in Operation	Per Cent Married	Per Cent With Off-Farm Income
1. Arnold (1953)	26				
2. Ahalt (1956)	23				
3. Gretebeck (1960)		8+	70-90 acres		
4. Edington (1961)	34	11.5			
5. Mathis (1966)	28	12.5	324	86.5%	
6. Martinson (1970)		10+			59%
7. Johnson (1975)					72%
8. Wyngarden (1978)	24	14	1,024	50+%	
9. Smith & Knudtson (1979)	25	14.2	950	55%	59.6%

Figure 2

PER CENT RECEIVING DIFFERENT TYPES OF ASSISTANCE FROM THEIR FAMILIES

	Help from Family	Partnership Within Family	Family Farm Rent or Least
1. Arnold (1953)			80
2. Phipps (1953)	58		
3. Ahalt (1956)	86	73	
4. Gretebeck (1960)	92		80
5. Edmond (1970)	63.4		
6. Johnson (1975)	50+		74
7. Wyngarden (1978)	90		
8. Smith and Knudtson (1979)	85.1	68.9	73.3

Table 1

FREQUENCY AND PERCENTAGE OF 1st AND 2nd MENTIONED GOALS FOR BEGINNING FARMERS

Goal	1st Mentioned N	1st Mentioned %	2nd Mentioned N	2nd Mentioned %
1. Increase land base	66	41.7	26	28.9
2. Acquire farm unit	20	12.7	2	2.2
3. Continue after father on farm	19	12.0	7	7.8
4. General growth of unit	15	9.5	5	5.6
5. Self sufficiency	12	7.6	11	12.2
6. Increase livestock	6	3.8	18	20.0
7. Add new operation (e.g., irrigation, dairy, etc.)	5	3.2	8	8.9
8. Comfortable living	7	4.4	9	9.9
9. Others	7	4.4	4	4.4
	158	100.0%	90	100.0%

Table 2

COMPARISON OF THE MAGNITUDE ESTIMATOR SET OF BENEFITS RECEIVED FROM FARMING BY AGE OF OPERATOR

Item	Age					
	40[a]		40 50[b]		50[c]	
	Value	Rank	Value	Rank	Value	Rank
Doing Something Worth while	116.4	1	117.5	1	113.5	1
Be Own Boss (base value)	100.0	4	100.0	3	100.0	3
Provides Good Income	82.1	6	96.7	4	99.5	4
Selling Through a Free Market	80.7	7	110.8	2	82.5	7
Sense of Security	100.7	3	92.0	5	89.5	5
Work Outdoors	92.9	5	80.4	7	105.0	2
Can Express Myself	102.1	2	80.8	6	83.5	6
Meet Fellow Grain Producer	64.3	8	53.3	8	60.5	9
Family Tradition	52.1	10	45.0		63.0	8
Receive Recognition	54.3	9	34.6	11	57.0	10
Identified as Grain Producer	43.6	11	40.0	10	51.0	11

[a] n=7

[b] n=12

[c] n=10

SESSION G

APPLIED SOCIOLOGY

THE IMPACT OF ELDERLY-TARGETED PROGRAMS IN TWO WESTERN ARKANSAS COUNTIES, Diana Danforth, Mary Jo Schneider and Donald E. Voth, University of Arkansas.

PROVIDING OPERATIONAL RESEARCH TO COMMUNITY DECISION MAKERS, William W. Linder and Pamela H. Rodgers, Southern Rural Development Center, Mississippi State University.

AN ASSESSMENT OF CITIZEN PARTICIPATION IN NATURAL RESOURCE PLANNING AND DECISION-MAKING, Sally Purohit, Auburn University.

FACTORS ASSOCIATED WITH DIFFERENT EXTENSION PROGRAMMING APPROACHES, C. L. Taylor and W. R. Summerhill, University of Florida.

THE IMPACT OF ELDERLY-TARGETED PROGRAMS IN TWO RURAL WESTERN ARKANSAS COUNTIES

Mary Jo Schneider, Diana M. Danforth, and Donald E. Voth
Department of Agricultural Economics and Rural Sociology
University of Arkansas, Fayetteville 72701

ABSTRACT

Purpose

This report summarizes the results of an evaluation of a Model Project for senior citizens in Crawford County, Arkansas. The evaluation was designed to determine the extent to which participating in the Project affected entries into nursing homes and hospitals, days of restricted activity, frequency of physician visits, self-perceptions of health and well-being, and use of other available social services. The evaluation was also to determine whether or not the programs were cost-effective; that is, whether or not the programs could prevent a sufficient number of persons from becoming institutionalized to justify their costs. The Project provided senior citizens centers, a mini-bus system, a mobile medical screening unit and home health aides.

Methodology

A quasi-experimental longitudinal design was developed to evaluate the Crawford County Model Project. Franklin County, an adjacent and socioeconomically similar county, was chosen as a control since at the inception of the evaluation none of the services offered by the Pilot Project were to be available there. The evaluation design required the selection of a representative sample of persons age 62 and above in both counties. Identical questionnaires were administered to the two samples

before the programs were in effect (1977) and the panel was reinterviewed after two years of program operation (1979). The original plan to compare experimental and control counties was altered when services were instituted in Franklin County. The best alternative left was to compare program participants and nonparticipants from both counties on the same variables. Nonparticipants would serve as the control group, after statistically controlling for initial differences in the two groups. Quota sampling was used to draw a representative sample of the elderly in each county (100 per county), and this sample was augmented by administering the questionnaires to the first 300 persons who went through medical screening in Crawford County and to the first 200 who were screened in Franklin County. Augmenting the quota sample was necessary to have numbers sufficient to estimate program effects on institutionalization.

Results

Utilization of and Satisfaction with Services. Based on estimates from the quota sample alone, only ten percent of the elderly did not know where a senior center was located, and about two-thirds had attended a center at least once. However, only twelve percent attended a center on a regular basis (once a week or more often). Of those who had attended, a majority rated their experiences as either "very satisfactory" or "pretty satisfactory". Sixteen percent had used the medical screening service, nine percent had ridden a "60-plus" bus, and nine percent had received a home-delivered meal.

All respondents were asked, "Do you think that most people in your area feel that these kinds of programs for senior citizens are a form of charity?" Over two-thirds replied, "no", indicating that a majority felt the programs were not stigmatized by a welfare image. An overwhelming majority (98 percent) felt that the programs had helped a lot of people in their area, and 20 percent even said that they could think of a specific individual who might have had to move in with relatives or into a nursing home if the newly placed services had been unavailable.

Institutional Proneness of Participants. The characteristics of nursing home residents were used to predict participation in senior centers. If these characteristics were found to successfully differentiate between participants and nonparticipants, there would be strong evidence that the program was appropriately targeted. However, only one characteristic of the institutionalized population, living alone, was significant in predicting program participation. Whereas persons in nursing homes tend to be female, over 75 years of age, have chronic health problems, and have had a hospital episode in the past year, participants in senior center programs do not have these characteristics significantly more often than nonparticipants. This means that in several respects senior centers are not effectively reaching those with high risk profiles.

Effect on Institutionalization. Program participation did not affect entries into nursing homes. Although only 11 out of 456 persons in the sample entered nursing homes over the two year period of study, a higher percentage were participants than nonparticipants. This tendency was not statistically significant, but does indicate that the program had no effect on confinement to nursing homes.

Potential for Cost-Effectiveness. To be cost-effective, the cost of the Model Project would have to be less than the cost of institutionalization. To break even with all costs of the program 280 admissions would have to be prevented each year, and to break even with taxpayer costs alone 102 admissions would have to be prevented annually. We estimate that an average of only about 75 elderly persons from Crawford County enter the nursing home each year.

Impact on Health, Life Outlook, and Use of Other Government Services. Program participation had no statistically significant impact on health status or on the use of Medicaid, Food Stamps, or Supplemental Security Income (SSI). Among those in the medical screening sample, participation appeared to affect life outlook as measured by responses to the questions, "How happy are you these days?" and "Do you expect an interesting and pleasant future?" Regular attendance at the senior centers was associated with a significant improvement in life outlook over the two year period. However, infrequent participants were less happy in 1979 than those who had not attended at all.

Conclusions

Although senior citizens programs in rural Arkansas had a positive image among elderly county residents, there was no empirical evidence that participating in the programs had beneficial effects on health or on preventing institutionalization. The programs could not, therefore, reach their goal of cost-effectiveness. There was some evidence that program participation increases life satisfaction, but this tendency was not a strong one.

PROVIDING OPERATIONAL
RESEARCH TO
COMMUNITY DECISION MAKERS*

Pamela H. Rodgers
Research Associate
Southern Rural Development Center

and

William W. Linder
Director
Southern Rural Development Center

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*This paper was prepared for presentation at the Southern Association of Agricultural Scientists Meeting, February 3-6, 1980, Hot Springs, Arkansas.

Local[1] government leaders in the United States are constantly being called on to make decisions among alternatives for providing services and facilities for their communities. Often these decisions must be made in a relatively short period of time, even though their impact on the communities involved may be long ranging. In the past, these decisions were made all too frequently without sufficient information on the options available to decision makers and on what their impacts might be.

University researchers have the potential to offer technical assistance[2] to local decision makers. Universities have a vast array of resources which they can bring to bear on problems facing local governments. However, as the problems of these communities grow more numerous and complex and the need for solutions grows more intense, university researchers must develop a methodology for responding more rapidly to requests for assistance.

The purpose of this study is to identify a number of mechanisms available for bringing university researchers and local officials together to develop solutions to local problems. The study examines university responses to the research needs of local decision makers and discusses ways to improve this university/local governmental collaboration. The overall project objective is to analyze the potential of university-based researchers to respond more quickly to community-based needs for research information. The focus is on the types of problems a university/local collaboration can effectively deal with and on the variety of approaches available for the successful organization of university/local collaboration.

Problems and Needs of Local Governments

As we enter the 1980's, researchers who provide information to aid local decision makers must recognize the multitude of problems and data needs facing these officials. From pollution to financing, unemployment to personnel management, local officials confront problems that seem to daily grow in number and in complexity. These problems create information needs that range from immediate (pest control, energy conservation) to long term (projections of future demand for a service). Of course each community has its own unique set of problems, but certain generalizations can be made concerning problems and needs of all local governments.

Whether communities are growing, declining, or remaining static, the demands on local leaders are increasing while their resources and capabilities for meeting these demands may or may not be. George Blair argues that "American institutions of local government are under severe and pressing strain. While they were reasonably well designed to meet the simpler needs of earlier times, they are poorly suited to cope with the new burdens placed on all governments by the complex conditions of modern life."[3] In a recent memorandum, the Secretary of Agriculture Bob Bergland states that "in many instances, (localities) have only limited institutional capacity and technical and financial resources to cope with such changes."[4] Local decision makers "do not have the planning staffs or technical assistance that are available to larger units of government to evaluate organizational alternatives for community services or to analyze changes in the economic structure."[5]

As these comments indicate, American localities are faced with a variety of information and research needs. They also reveal the diversity of meanings of the term "technical assistance." As the Institute of Governmental Administration at Georgia State University notes, "At present there is no universally accepted definition of the term technical assistance."[6] This research uses the broad definition of the technical assistance needs of local decision makers developed by the General Accounting Office (GAO). Technical assistance is:

> A term used to refer to programs, activities, and services provided by the Federal Government, a Public Interest group, or another Third Party to strengthen the capacity of recipients to improve their performance with respect to an inherent or assigned function. The delivery of technical assistance requires serving one or more of three functions: (1) transferring information, (2) developing skills, and (3) developing and transferring products.[7]

The GAO discusses three categories of technical assistance: general management assistance, functional assistance, and technology transfer or sharing.

General management assistance emphasizes strengthening the capability of local officials in planning, implementing, managing, and evaluating policies and programs for a general purpose government. This is sometimes termed "capacity building." Functional assistance stresses "management services and/or technical services in support of specific Federal or non-Federal programs, projects, or functional operations." Technology transfer "or sharing means dissemination of and assistance in making use of technological advances."[8]

The provision of technical assistance for local governments must enable communities to deal with short, intermediate, and long-term local problems.[9] Very often, research on community problems is of a long term nature, rather than "quick and useful" studies on issues of immediate interest to local officials. In providing technical assistance to localities researchers must attempt to improve the ability of local governments to deal with "brush fires" as well as capacity building, but all too often the provision of functional, general management, and technology transfer assistance is viewed on a long-term basis. This is unfortunate because often the greatest technical assistance needs of local officials lie in attempts to deal with short-run problems and researchers must be willing and able to assist decision makers in a prompt and expert manner. A greater emphasis on technical assistance for localities in the short run must be developed.

Commitments to improve management capacity of local governmental units is receiving widespread support as we prepare to enter the 1980's. The organizational structure, leadership style, and decision making capabilities of local governments in the United States have not kept pace with the profound social and technological changes of the twentieth century.

Revitalizing local governments is an issue of utmost importance if these units of government are to continue as viable contributors to American life in the coming years. One key to revitalizing local governments is to provide local leaders with the necessary expertise and managerial capabilities so that they will be better able to deal with the issues facing their localities. The emphasis here, then, is to correct the cause of ACIR's criticism that there is "not enough local government."[10] Our contention is that the development of university resources can provide local leaders with the information, research, and expertise necessary to strengthen local units of government.

University Resources and Problems

The need to solve the wide variety of problems facing American localities offers a challenging opportunity for universities to provide expertise for local officials. There is widespread agreement that the mission of American universities lies in pursuing excellence in three areas: research, teaching and service.[11] The traditional emphasis on research and teaching has been broadened in recent years to the consideration of mechanisms to improve the service component of universities' missions. But while the needs of localities are limitless, and the consequent opportunities for university/local collaboration are great, difficulties involved in strengthening the service component of American universities must be considered. Universities have the resources to tackle a multitude of local problems, to propose alternative courses of action, to develop solutions, and to improve the management capabilities of local governments, but barriers to such an increased service role abound. While lip service has historically been paid to the three university roles as equal partners in the institution's mission, in actuality service has always ranked a poor third to research and teaching. This present university system of research, teaching, and service must be examined and ways to strengthen all three missions of American universities must be developed. Thus, the goal of improving the service role of the university is not seen as a negation of the research and teaching roles. It is not competition between these three missions which should be emphasized, but cooperation. As Durward Long notes, "In all cases, the (public service) activities should enhance the instructional and research programs rather than detract from them."[12]

The Traditional Mechanisms for the Provision of Public Services by Universities

The three traditional approaches to organizing the university for its research, teaching, and public service missions are departmental organization, interdisciplinary institutes, and extension mechanisms (the Cooperative Extension Service at land grant universities and varying extension organizations at non-land grant institutions). In the section that follows, these three mechanisms will be discussed and the advantages and disadvantages of each type of organization for the provision of public services by the university will be considered.

An initial proviso is in order, however, in recognition of the variations in the organizational styles of American universities. As Kenneth Polk notes, "The university of today has responded to a number of different forces and, thus, represents a conglomeration of traditions and a correspondingly complex organization."[13] The departmental, institute, and extension mechanisms discussed in this chapter represent the principal arrangements at universities though variations on these mechanisms abound.

Traditionally, the American university system is structured around departmental organization throughout the university with individual faculty members pursuing their teaching and research interests in their specializations within their disciplines. The Carnegie Commission on Higher Education notes that there are various types of departmental organization, but that it is "usually along decentralized departmental lines with interdepartmental lines of communication and hierarchical administrative organization."[14]

Kenneth Polk discusses the departmental organizational structure of the university: "As a bureaucracy, the structure of the university is relatively frozen into an organization of semi-autonomous departments. As a consequence budget decisions, personnel matters, and much of the routine administration take place within specialized departments."[15] This kind of organization has major implications for the fulfillment of the teaching, research and public service roles of the university.

There is, in fact, some debate about the suitability of departmental organization for any orientation other than teaching at the university.[16] James Perkins writes: "The traditional university structure devised for instruction is largely irrelevant to research and is almost antithetical to serving the needs of society."[17] Perkins emphasizes the compatibility between these three roles of the university, but his point is well taken that they may require different forms of organization for the effective fulfillment of the research, teaching, and public service missions. Perkins' concern lies with the incompatibility of the departmental system originally developed for effective teaching and the more recent research orientations of university faculty. This concern about the applicability of departmental organization to the research role can be expanded to the public service mission as well. University public service or outreach involves both research and training programs for local officials. The need for an effective public service orientation highlights the need for an integrative teaching and research orientation and for organizational alternatives which stress the compatibility of these three missions rather than their differing perspectives.

Jay Galbraith's discussion of functional organization structures and the advantages and disadvantages of this type of organization is relevant here. Universities' functional departmental organization facilitates the training of specialists in their respective disciplines. Galbraith writes: "It minimizes the number necessary by pooling specialized resources and time sharing them across products or projects. It provides career paths for specialists. Therefore, the organization can hire, utilize, and retain specialists."[18] The utility of functional departmental organization for the teaching mission of the university is well known.

Problems arise when the research and public service tasks of the university are introduced. Galbraith notes, "However, the tasks that the organization must perform require varying amounts of the specialized resources applied in varying sequences. The problem of simultaneously completing all tasks on time, with appropriate quality and while fully utilizing all specialist resources, is all but impossible in the functional structure. It requires either fantastic amounts of information or long lead times for task completion."[19] These criticisms of departmental organization are reflected in the lack of public service orientation of universities. The emphasis on specialization for discipline recognition results in a research orientation which often times negates public service research and training unless such emphases are recognized as an acceptable discipline pursuit.

On many campuses, interdisciplinary institutes have been designed to overcome the deficiencies of departmental organization. These institutes often merge or cross disciplinary lines with emphases common to a variety of fields. Many of these institutes have a strong interdisciplinary research orientation and teaching emphasis. Kenneth Polk argues that such "innovation is rendered more feasible by creating an autonomous unit within the university. While this unit can and does draw upon course offerings and staff from the more traditional liberal arts departments, it can also create its own courses manned by its own personnel where necessary."[20]

The interdisciplinary institute organizational structure can facilitate the research and public service missions of the university, and provide an acceptable alternative organizational style for the teaching mission. The recognition that a research problem may require cross-disciplinary research is also evident in the public service field. The need to bring a variety of university experts together to deal with local problems has resulted in a number of institutes aimed at the university's public service mission.

Galbraith has identified the advantages of the product or project form of organization typified by interdisciplinary institutes in the university. "It facilitates coordination among specialites to achieve on-time completion and to meet budget targets. It allows a quick reaction capability to tackle problems that develop in one specialty, thereby reducing the impact on other specialties."[21] Thus, the project form of organization exemplified by interdisciplinary institutes overcomes the key deficiencies of functional departmental organization: "It (functional organization) requires either fantastic amounts of information or long lead times for task completion."[22] But, project organization also has its weaknesses: if the organization has two projects, it can either hire two specialists and incur duplication costs or it must reduce specialization. And, "In addition, no one is responsible for long-run technical development of the specialities. Thus, each form of organization has its own set of advantages and disadvantages. A similar analysis could be applied to geographically or client-based structures."[23]

Galbraith continues: "The problem is that when one basis of organization is chosen, the benefits of the others are surrendered. If the functional structure is adopted, the technologies are developed but the projects fall behind schedule. If the project organization is chosen, there is better cost and schedule performance but the technologies are not developed as well."[24] Galbraith's solution is to emphasize the strong points in both functional and project organization by stressing a matrix of organizational design integrating the two approaches. In the modern university, such an approach is often evident although this organizational matrix integrating functional departmental organization and project interdisciplinary institute organization has not often been arrived at as the result of a conscious decision about organization priorities for teaching, research and public service. Thus, universities are organized in a variety of ways, though not necessarily in a manner conducive to the optimal fulfillment of their missions. Clearly the functional departmental organization remains feasible for the teaching role, but as Perkins previously noted, may not be the optimal mechanism for research or public service. These latter missions should prosper under the project form of organization.

The Cooperative Extension Service offers another existing model of university organization for teaching, research, and public service which integrates both functional and project organization. CES integrates the teaching, research, and outreach or public service role of the university. Cooperative Extension has been characterized as emphasizing the following characteristics: a broadened program role, intensive and sophisticated service to agriculture, development-type programs, increasing specialization of staff, in-depth and packaged programming using Extension research teams, applied or developmental research conducted by Extension specialists, the provision of indepth training, often through specialist teams, and the employment of new educational techniques.[25] James R. Miller in his doctoral dissertation, Extension Model, argues that the Cooperative Extension Service at land grant universities provides the main outreach function of these institutions.[26] Clearly, Extension integrates the university's teaching and research functions into its public service role. But, as Edward Moe notes, "It should be clear that this model, prestigious as it is, has not and does not now serve the social sciences and social science research to the same degree that it serves agriculture."[27] The emphasis in extension outreach efforts has been broadened in recent years, however, with the recognition of the technical assistance needs of local governments and "the rather solid evidence that the principles inherent in the work with agriculture and specifically the involvement of users apply in the social sciences."[28] As Moe argues, "the land grant system research-education-extension-public service, (is) a research application model that works."[29]

CES University/Local Collaboration

Many of local government's short, intermediate, and long term needs for technical assistance are being met through a variety of CES programs. Three diverse CES mechanisms for university/local collaboration will be discussed in the remainder of this paper: Penn State University's Title V Rural Development assistance to Pennsylvania communities, the CTIP circuit rider approach to city management, and Mississippi State University's Center for Governmental Technology (CGT) which provides technical assistance for localities in Mississippi.

Penn State's Title V efforts[30] to assist local governments offer a good example of CES's combined teaching, research, and service emphases. The philosophy behind the Penn State program stresses local communities identifying their own problem areas and university researchers working promptly to help find solutions to these local needs. Penn State's staff acts as facilitators to assist local efforts rather than as advocates or decision makers determining priorities for communities. The emphasis is on improving the local capacity to undertake rural development efforts and to solve local problems. This increased local capacity building is produced through an integrated research and service effort. Local people define community needs and then Penn State researchers contribute objective information and explain how citizens can interpret the information. New knowledge gained from these efforts is documented and distributed to other areas of the state.

The melding of the research and extension functions of the university in Penn State's Title V efforts is also evidenced in the organizational design of the program. The Title V program is structured around joint staff appointments with the Departments of Rural Sociology and Agricultural Economics and the Cooperative Extension Service. The joint research-extension appointments provide colleagues and support from both the university departments and the county extension office.

In addition to integrating the functional and project designs of departmental and CES organization, the role of the Community Development Specialist in the Title V program was carefully considered to optimize community efforts with university assistance. In the initial study, three counties were chosen and the Community Development Specialist worked in each county to identify needs through a needs assessment citizen survey and meetings in each county soliciting citizen views. Once a working relationship had been established and local needs identified, then the Community Development Specialist worked as an objective consultant providing technical assistance to meet local needs. Thus, the Specialist acted as an educator, meeting organizer, motivator, objective third party, expert, researcher, and a consultant with access to technical information. Noticeably absent from this listing is an emphasis on specific policy areas of expertise such as water resources, housing, or personnel policy. The Specialist was to be responsive to the issues and needs of communities and these varied from community to community. The Specialist assisted on a variety of local needs rather than singling out one issue orientation. The Penn State objective is to be able to help the community define the issue before it, consider alternatives, and help in the resolution of the issue through the chosen alternative.

In addition, the initial case studies in the three demonstration counties could be applied to similar needs throughout the state. Thus, the research and extension efforts in the three counties contributed to the building of general knowledge of the rural development process which could be applied to similar situations throughout Pennsylvania.

The Community Technology Initiatives Program (CTIP), in contrast, is a national program to address the common scientific and technological needs of local governments (municipalities, townships, and counties) under 50,000 in population. In its initial year a network of selected localities across the United States will benefit from CTIP's emphasis on strengthening local government capabilities through a CTIP forum providing a meeting ground for local officials to coordinate objectives and strategies together. The emphasis is on a technology transfer system which will bring current information to bear on local problems. Since the program is national in scope, CTIP will have access to the broad based resources of the Federal government, industry, universities, and other units of government in the United States.

Initially, CTIP is funding circuit riding technology agents to assist 28 cities and townships and three counties from around the nation. These agents will develop an agenda of R&D priorities and search for solutions to these priorities for participating communities. Each agent provides assistance to public officials in defining and solving technical problems for three to five local governments in the CTIP program. In addition, the agents will develop sources of technical data useful to communities on the circuit from within Federal laboratories, agencies of other local governments, industry, and university resources.

The goal of the CTIP circuit rider approach to city management is to demonstrate that smaller local governments can act in concert to stimulate innovation, technology sharing, and greater research and development capacity with direct benefits to problem solving and the delivery of public services. The results and benefits of program activities will be potentially applicable to government operations in hundreds of other municipalities, townships, and counties throughout the United States.

The Southern Rural Development Center is currently involved in assisting one of the CTIP circuit rider networks headquartered in Stillwater, Oklahoma and serving communities in the South and Midwest. The SRDC emphasis is on "linking" the USDA/CES extension/research network with the CTIP national focus on technology transfer. Currently evaluation research is being undertaken to determine the effectiveness and efficiency of the circuit rider/technology agent headquartered in Stillwater, Oklahoma. This agent's communities of technology transfer responsibility include Stillwater, Bryon, Texas, Ottawa, Kansas, and Clayton, Missouri. The emphasis is on identifying local needs, proposing solutions, developing evaluation criteria to determine if an innovation is cost effective for local government, and identifying technical personnel in Federal laboratories, universities and industry whose technical expertise can be applied to local government problems in an advisory capacity.

The Mississippi State University's Center for Governmental Technology reflects the research/extension/education emphases of the Cooperative Extension Service. CGT was established to provide innovative programs to assist local governments in Mississippi. The Center emphasizes training programs and the dissemination of research findings to government officials. Workshops, seminars, and technical assistance are also stressed. CGT personnel offer programs and assistance in a wide variety of policy areas identified by local officials in Mississippi: training for Mississippi city clerks, assessors, and tax collectors; seminars on local government financial management, county records management, road maintenance, computer procurement, and personnel administration; workshops for members and trustees of school boards, school attorneys, superintendents of schools, mayors, and newly elected supervisors; and training seminars on jail operations and guidelines for handling inmates.

These efforts are undertaken with the joint goals of research/extension/education for local officials in Mississippi. In addition to responding to the articulated needs of local officials for training and technical assistance, CGT also acts as a clearinghouse for new information to aid local governmental management and disseminates information on innovations of interest to local officials in a variety of publications.

CGT's organization within the Cooperative Extension Service allows for the advantages of project organizational design with its prompt response to local requests and trained specialists in local problems, and CGT has managed to avoid the pitfalls of project design by employing functional issue area specialists and generalists trained to provide technical assistance side by side. The mix of expertise provides CGT with skilled government training specialists and also offers the opportunity to utilize other university departmental resource persons in the provision of technical assistance for local governments.

These three examples show the diverse mechanisms available currently within universities to aid in the solution of local problems. The goal of the Penn State Title V Program, the CTIP circuit rider approach, and the Center for Governmental Technology is to establish a collaborative relationship between university resources for teaching, research, and extension and local leaders with problems demanding assistance. In all three instances, the emphasis is on providing quick responses to local needs as efficiently and effectively as possible. Also, the aim of integrating the teaching, research, and public service missions of the university is continually stressed and, although operationalized in a different manner in each example, each mechanism has been effective in providing technical assistance to its stated clientele.

Universities vary, communities vary, local problems vary, and attempts at interaction between universities and localities will necessarily be as diverse as these institutions of higher learning and government. But clearly lessons can be learned from effective instances of university/local collaboration: the organizational design of the university mechanism is of major importance, local leaders must identify their own community needs and then work closely with objective experts in considering alternative courses of action, and the emphasis within the university on integrating its teaching, research, and public service missions must be further developed. Local needs for technical assistance are growing in our complex and changing world. The potential for universities to assist localities in dealing with the complex issues and problems of modern times is great. "Communities have problems, universities have resources." The development of new mechanisms for this much needed university/local collaboration will be a major challenge in the decade ahead.

FOOTNOTES

[1] The major criterion for inclusion of a locality in this study is the size of the community or local unit. The focus here is on communities with populations of less than 50,000. By emphasizing localities below the 50,000 population mark, this study is crosscutting traditional urban/rural distinctions in favor of an emphasis on local problems of small to mid-sized American communities.

The 50,000 figure was not chosen arbitrarily. Traditional studies of local governments have made urban/rural categorizations based on a 50,000 cutoff point. (See Robert L. Lineberry & Ira Sharkansky, Urban Politics and Public Policy (New York: Harper and Row, Publishers, 1971, p. 2 and David A. Caputo, Urban America: the Policy Alternatives (San Francisco: W. H. Freeman and Company, 1976, p. 6).

The second defining characteristic of this study is its emphasis on the decision makers in these local governmental units. "The four major types of units entrusted with public responsibilities at the local level are counties, municipalities, townships (and towns), and special districts." See George S. Blair, Government at the Grass-Roots, second edition. The stress here is on the elected and appointed officials of American counties, municipalities, townships and special districts with populations under 50,000. Second edition, (Pacific Palisades: Palisades Publishers, 1977), p. 12.

[2] General Accounting Office, State and Local Views on Technology Assistance (Washington, D. C.: U. S. Government Printing Office, 1978), p. 5.

[3] George S. Blair, Government at the Grass-Roots, second edition (Pacific Palisades: Palisades Publishers, 1977), p. 319.

[4] Robert Bergland, "Statement on Rural Development," Secretary's Memorandum No. 1979 (Washington, D. C.: U. S. Department of Agriculture, March 21, 1979), p. 1.

[5] Lonnie L. Jones, Gerald Doeksen, James Nelson, and Ronald Shaffer, Computerized Economic Information and Analysis Systems for Micropolitan Decision Makers: A Proposal for Regional Research, submitted to the North Central Regional Center for Rural Development, February 1977, p. 1.

[6] Institute of Governmental Administration, Intergovernmental Relations in the Southeast: the Federal Role in Technical Assistance (Atlanta: Georgia State University, May 1975), pp. 42-48.

[7] General Accounting Office, State and Local Governments Views on Technical Assistance (Washington, D. C.: U. S. Government Printing Office, July 11, 1978), pp. 1-3.

[8] Ibid, p. 3.

[9] Short term research refers to projects which take 3 months or less to complete. The time frame for intermediate research is 4 to 12 months, and long term projects involve a year or more for completion.

[10] Commission on Intergovernmental Relations, A Report to the President for Transmittal to Congress (Washington, D. C.: U. S. Government Printing Office, 1955), p. 47.

[11] See for example, Robert Farman, ed., A Question of Partnership (Durham: University of New Hampshire Press, 1972).

[12] Durward Long, "The University as Commons: A View From Administration," New Directions in Higher Education, 18, (1977), p. 75.

[13] Kenneth Polk, The University and Corrections Potential for Collaborative Relationships (Washington, D. C.: Joint Commission on Correctional Manpower and Training, January 1969), p. 230.

[14] Lewis B. Mayhew, ed., The Carnegie Commission on Higher Education (San Francisco: Jossey-Bass, Inc., Publishers, 1973).

[15] Polk, p. 7.

[16] James A. Perkins, "The University as an Organization," in Lewis B. Mayhew, The Carnegie Commission on Higher Education (San Francisco: Jossey-Bass, Publishers, 1973), pp. 212-213.

[17] Ibid, p. 213.

[18] Jay Galbraith, "Matrix Organization Designs," in Max D. Richards, Readings In Management, 4th ed. (Cincinnati: Southwestern Publishing Co., 1974), p. 439.

[19] Ibid, pp. 439-440.

[20] Polk, pp. 68-69.

[21] Galbraith, p. 440.

[22] Ibid.

[23] Ibid.

[24] Ibid.

[25] Daniel C. Pfannstiel and Barbara H. Matthews, eds., Cooperative Extension Organization and Administration (Madison: University Extension, 1968), pp. 118-119.

[26] James R. Miller, Extension Model (Columbus: Ohio State University, Ph.D. Dissertation).

[27] Edward Moe, "Problems and Prospects of Application," Rural Development Research in Sociology (Mississippi State: Southern Rural Development Center Publication No. 19, August 1977), p. 33.

[28] Ibid, p. 35.

[29] Ibid, p. 33.

[30] For further information see the case study of the Penn State Title V Program in J. Patrick Madden, Rural Development and the Land Grant University (Washington, D. C.: National Rural Center, 1977), pp. 281-308.

AN ASSESSMENT OF CITIZEN PARTICIPATION IN NATURAL RESOURCE PLANNING AND DECISION-MAKING

by

Sally R. Purohit*

In recent years, demands for greater citizen involvement in administrative decision-making have escalated due to concerns over public accountability, the failure of previous public programs to meet genuine public needs, and the desire of individuals to participate more directly in decisions which affect them (Sewell and O'Riordan, 1976). This increased pressure of public participation in policy-making has resulted in renewed efforts at soliciting and incorporating citizen input into decision-making at all government levels, especially the federal level.

An example of this new emphasis on citizen involvement at the federal level is reflected in the current policy of the Heritage Conservation and Recreation Service, an agency charged with dissemination of Federal Land and Water Conservation Funds. These federal funds are administered at the state level to acquire land and develop recreational facilities. State planners are required to maintain and update a comprehensive outdoor recreation plan in order to qualify for the federal funds. This study focuses on citizen participation within the context of natural resource decision-making through an examination of public participation used in the state recreation planning process.

This study addresses four major objectives. They include: (1) what citizen participation techniques have been utilized by state recreation planners in the past five years and how were they used? (2) what are the dominant objectives of public participation at this level of natural resource decision-making? (3) how do state recreation planners feel about citizen participation in general and what problems have they encountered in their programs? (4) at what stages in a basic planning cycle is citizen input considered most valuable? Several explanatory variables were also used in this study, such as region, due date of the next state recreation plan, job status, sex, education and age.

Citizen Participation and Natural Resource Decision-Making

Several authors have tried to clarify and structure the citizen involvement process (Wengert, 1976; Rosenbaum, 1978; Voth and Bonner, 1978). The sharing or redistribution of influence or power is a central theme in these classifications. Studies of citizen participation may be grouped into four basic types: (1) case studies of projects or issues, (2) analyses of citizens who participate, (3) studies of the perspectives of administrative decision-makers, and (4) techniques of citizen participation (Potter, 1978). For the purposes of this paper, the most relevant studies are those which report on citizen participation techniques (particularly evaluation), and those which analyze agency staff strategies and objectives. Case studies offer some interest because they sometimes evaluate specific citizen participation techniques and examine the relationship between administrative staff and involved citizen.

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*Department of Agricultural Economics and Rural Sociology, Auburn University, Auburn, Alabama.

Evaluation of Citizen Participation Programs

A wide variety of citizen participation techniques has been developed in recent years (Rosener, 1975; Lind, 1975; Voth and Bonner, 1977). While there is a large volume of materials relating to citizen participation techniques, there are not many studies which focus on the effectiveness of participation. As Rosener (1978) points out, there is no reason to assume that more participation will necessarily result in better policy. Thus, it is important to evaluate the different types of programs.

Much of the work that has been done in evaluation of citizen participation programs or techniques in natural resource decision-making originates in Canada. A recent article by Sewell and Phillips (1978) examines the evaluation models of four authors and 22 case studies. They conclude that there is no generally accepted evaluation model and all frameworks suffer from some serious deficiencies. They discovered that there is a high degree of variability concerning the perceived goals of public participation, evaluation criteria, and evaluative conclusions depending on whether agency personnel, citizen group representatives, or independent observers conducted the evaluation.

Types of citizen participation program evaluation criteria include: benefits derived from participation, extent of representation of various publics, resources available to the program, attitude of the agency toward the program, amount of technical assistance available to educate the citizens, and adequate planning for the program. Ideally citizen participation programs must be integrated into the planning process, be given adequate time to develop, and utilize appropriate techniques (Voth and Bonner, 1978). Sewell and Phillips (1979) found that independent evaluators emphasized the extent to which a citizen participation program fulfilled its objectives, the degree of representation, and the accuracy of the information gathered as evaluation criteria. Our study attempted to use several of the criteria suggested by other authors as dimensions for evaluation of citizen participation techniques used in state outdoor recreation planning.

Strategies and Objectives of Administrative Citizen Participation

There have been several typologies of administrative citizen participation strategies developed. For instance, Fox (1971) has delineated four strategies: decentralization, engineered consent, therapy, and equal protection. Others who have developed similar typologies are: Arnstein (1969) who elaborated a ladder of citizen participation based on degree of citizen power; Burke (1968) who identified five citizen involvement strategies; and Wengert (1976) who classified perceptions of public participation.

There are also several typologies of objectives which are usually more program specific than strategies or goals. Doerksen and Pierce (1975) identify three major goals or themes which characterize citizen participation strategies: self-fulfilling goals, symbolic goals, or instrumental goals. Similarly, Voth and Bonner (1978) have isolated the following objectives of citizen participation: (1) sharing power with citizens, (2) influencing citizen attitudes, (3) mobilizing the resources of the citizenry, (4) gaining credibility for programs, (5) reducing conflict, and (6) determining citizen preferences. Sewell and Phillips (1979) also identify three objectives of public participation programs which must be weighed against each other: a high degree of citizen involvement, a high degree of representation or equity, and high efficiency (time, cost) for the agency. These objectives represent trade-offs in that all three cannot be simultaneously pursued to the same extent.

Characteristics of Administrative Citizen Participation

In addition to goals, typologies and objectives, the relationship between citizens and bureaucrats which is characteristic of administrative citizen participation has been elaborated (Voth and Bonner, 1978). One characteristic is ambiguity of authority. This refers to the blurring of responsibility that occurs when government officials share decision-making with citizen groups. Redundancy of functions is another characteristic which concerns the duplication which frequently occurs between governmental entities.

The third characteristic is the development of a special relationship between citizens and bureaucracy. Administrators typically have the discretion to identify affected constituencies, and stimulate their involvement. This may reduce apathy and gain support for specific programs or it may lead to certain vested interests gaining public power and control. When citizen participation is mandated for a government agency, that agency also assumes authority for setting the guidelines for that participation. The fourth characteristic is the assumption of constitutional controls by the bureaucracy. The agency may determine who is a citizen, develop selection procedures, and even select the representatives.

Research Methods

Data Collection

A survey of state recreation planners was conducted by means of a mail questionnaire in June, 1979. Each of the 50 states and Washington, D. C., were contacted individually. Lists of state recreation planners were obtained with the help of the federal agency, Heritage Conservation and Recreation Service, and by reference to the National Wildlife Federation's Conservation Directory (1979). The cover letter requested that the questionnaire be completed by the planner who was most knowledgeable about public participation in the state recreation planning process. Dillman's method for mail surveys (1978) was used as a general model for this study. The final response rate was 96%, providing data from 48 states and one district.

Measurement and Analysis

The survey instrument was designed especially for use in examining citizen participation in state recreation planning. Six of the most widely used citizen participation techniques were employed as the basis for formulating questions about actual use of specific techniques. These techniques (the workshop, attitude survey, public hearing, interviews with knowledgeables [key persons], advisory groups, and public information programs) were gleaned from a study of the public participation literature (Purohit, 1979). If planners had used any of these techniques, they were asked to evaluate the level and type of participation, representation, effect on policy, and information gained.

While there are many other evaluative criteria that could be used, the categories suggested (Voth and Bonner, 1978) were employed as fundamental dimensions for evaluating citizen participation techniques.

Efforts were also made to identify the relative importance of various objectives used in the recreation planning process. Items were developed for the six objectives derived from Voth and Bonner (1978), and an additional objective emerged from the pretest of the survey instrument. In addition, the characteristics of administrative citizen participation (Voth and Bonner, 1978) were utilized as the basis for item development in an effort to examine the attitudes of recreation planners toward public participation.

Additional information obtained through the questionnaire included an open-ended question on the problems and limitations of citizen participation and a question which was designed to discover how feedback from citizens is transformed into input to the planning process. A circular representation of the stages of a planning process was adapted from a cycle assembled by the Heritage Conservation and Recreation Service (1978). Recreation planners were asked to indicate at what points in the circle they received the most valuable input from citizens.

Explanatory variables which were utilized included: the due date of the next state recreation plan, region, job title, years in job, sex, education and age. As a variable, region was interpreted as the subdivisions of the country under different regional offices of the Heritage Conservation and Recreation Service. It was hypothesized that different district emphases might be reflected in state programs and attitudes. The state recreation plan due date was also utilized because new federal guidelines have resulted in changing citizen participation approaches. It was also hypothesized that differences might emerge between recreation planners and supervisory recreation planners.

In addition to percentage distributions of responses, a test of difference between means was used to examine regional differences, differences between job statuses, and differences in the due date of the next state recreation plan in relation to: (a) the number of times a specific public participation technique was used in the last five years, (b) attitudes toward administrative citizen participation, and (c) objectives of public participation. One-way analysis of variance was also utilized to examine regional, job status and state recreation plan date differences for use of techniques and attitudes toward public participation. In general the use of analysis of variance and tests of difference between means did not yield significant results.

Results

Evaluation of Citizen Participation Techniques

In Table 1, the median frequencies of use of a citizen participation technique show that the public hearing was the most commonly used technique, followed by key interviews, public information programs and advisory committees. Since a citizen survey is a costly and time-consuming technique, it should be expected that there would be fewer occurrences of this technique. These results should be cautiously interpreted because: (a) many recreation planners have not been in the same position for those five years, and (b) there appeared to be

Table 1. The Use of Selected Citizen Participation Techniques by State Recreation Planners

	Percentages					
Dimensions	Public Hearing	Survey	Key Interviews	Advisory Committees	Workshop	Public Information
Median Frequency (last 5 years)	9.6	2.2	5.8	5.1	4.2	5.3
Level and Type of Participation						
> 100, active	19.4	77.5	16.7	16.2	45.7	NA
< 100, active	27.8	2.5	58.3	75.7	42.9	
> 100, limited	11.1	20.0	8.3	2.7	5.7	
< 100, limited	41.7	0	16.7	5.4	5.7	
Representation						
cross-section	37.8	82.9	8.3	26.3	5.6	81.3
leaders	13.5	2.4	55.6	36.8	22.2	0
specialized groups	27.0	0	16.7	28.9	41.7	9.4
other	21.6	14.6	19.4	7.9	30.6	9.4
Effect on Policy						
one of several factors in setting policy	70.3	78.0	80.6	73.7	72.2	NA
basis for policy	10.8	14.6	16.7	23.7	11.1	
no effect on policy	10.8	4.9	2.8	2.6	5.6	
other	8.1	2.4	0	0	11.1	
Information Gained						
determine supply	11.1	14.9	15.5	11.4	6.8	10.9
assess demand	16.7	36.6	15.5	15.9	16.2	10.9
identify problems	37.5	31.7	40.5	37.5	48.6	32.6
approve or reject aspect	30.6	16.8	28.6	34.1	28.4	19.6
none	4.2	0	0	1.1	0	26.1

differences in perception of what constituted a single occurrence of a technique.

Other criteria which were used in this analysis included participation, representation, effect on policy, and types of information gained. Recreation planners were asked about the number of people involved and whether the extent of activity was active or limited. Generally, the public hearing involved less than 100 persons, with limited participation and to a lesser extent, active participation. The survey almost always involved over 100 persons, and was usually considered active participation. Both key interviews and advisory committees typically included less than 100 persons with active participation. Workshops included both large and small numbers of participants, and the participation was perceived as active.

Representation was designed to discover what segments of the population were reached by each technique. Surveys were most often used to obtain a cross-section of opinion, and key interviews were designed to interview leaders. Public information programs reached a broad cross-section. The most commonly utilized methods of disseminating public information were brochures, newsletters and other types of publications. Letters and exhibits were also used.

There is more diversity in the audience reached with the public hearing, advisory committees and workshops. There are certain tendencies which emerge, however; about 40% of the states reached specialized groups with the workshop, reached a cross-section with public hearings, and reached leaders with advisory committees.

Generally, input from each technique was used by the states as one of several factors in setting policy, and was usually not ignored in setting policy. A few states did use the information derived from a technique as the basis for policy (advisory committees in particular).

Several kinds of information were gained from the use of each technique. Overall, the techniques were most useful in identifying problems. The survey was also frequently used to assess demand. For all techniques except the survey, at least half of the respondents gained information which was used to approve or reject aspects of policy. Generally, the techniques were only occasionally used to determine supply, although the survey and key interviews were used for that purpose more often than other techniques.

Problems in the Use of Citizen Participation

An analysis of the responses to an open-ended question about the problems and limitations on the use of citizen participation revealed that a majority of the state planners mentioned either time or cost constraints. The major problem was time (29%) and the second most important problem was costs (21%). In order of their ranking, other problems which were mentioned by several states were: generating and sustaining public interest (15%) and obtaining input which is representative and includes the average citizen (12%). Other problems were isolated, such as problems with specific techniques and the lack of staff resources. Discrepancies between citizen participation methods and objectives and problems with the domination of special interest groups were also enumerated.

Many of the recreation planners included additional information about their citizen participation prgrams, and one conclusion that could be drawn from a comparison of many states is that there seemed to be a wide variety of approaches and programs. The types of programs were partially dependent on state characteristics, such as a small and dispersed population (North Dakota) versus a large and concentrated population (California). Also, some of the planners perceived a need to maintain an awareness of the values and attitudes of the citizens of their state.

Stages of Recreation Planning

The circular representation of planning stages in which citizen input may be obtained contained eight steps: generation of ideas and problems, assessment of supply, determination of demand, identification of needs, policy options, policy plan, approval of policy plan, and implementation. The two stages of state recreation planning which emerged as important sources of input were: (1) the generation of ideas and problems; and (2) the identification of needs. The least utilized stages of input were policy plan and implementation. Responses were well distributed among the different stages, but generally input was utilized in the initial stages of identifying needs, problems and demand rather than in the latter stages of setting and implementing policy.

Objectives of Citizen Participation

In Table 2, the percentages of states that ranked an objective as first, second or third choice and cumulative percentages for rankings of each objective are listed. A wide majority of respondents selected determining citizen preferences (84%) and educating citizens about programs and processes (83%) among their top three rankings. Two other objectives emerged as next in importance: 61% of state recreation planners ranked "utilize human resources of citizens," and 60% rated "gain support for programs" as high priority objectives. Thirty-eight percent of the states considered the objective of reducing conflict as important, and 35 percent listed fulfilling legal requirements among their top three choices.

Attitudes Toward Characteristics of Citizen Participation

Attitudes of recreation planners toward characteristics of administrative citizen participation were examined. The four characteristics unique to administrative citizen participation developed by Voth and Bonner (1978) were empirically employed. Support was found among this group of state recreation planners for three of the four characteristics, as measured in this study: ambiguity of authority, the development of a special relationship between decision-makers and citizens, and the delegation of constitutional controls to agencies. Planners did not perceive redundancy of function between themselves and citizens. Planners felt that they have the right to develop selection procedures to determine which citizens to involve in the public participation process, thus assuming some formerly legislative responsibilities. They agreed that administrative decision-makers are subject to demands from citizens as well as higher echelons of government, which results in vague authority patterns. Table 3 presents percentage distributions of these responses.

Table 2. Citizen Participation Objectives

Objectives	Percent of Sample Ranking Item			
	1st Choice	2nd Choice	3rd Choice	Among Top Three Choices
Determine citizen preferences N = 43	38.6	38.6	6.8	84.0
Educate citizens about programs and processes N = 42	26.2	26.2	31.0	83.4
Utilize human resources of citizens N = 32	21.2	15.2	24.2	60.6
Gain support for programs N = 35	2.9	22.9	34.3	60.1
Reduce conflict N = 29	6.9	10.3	20.7	37.9
Fulfill legal requirements N = 26	23.1	7.7	3.8	34.6
Increase power of citizens over programs N = 21	14.3	9.5	9.5	33.3

Table 3. Characteristics of Administrative Citizen Participation

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Missing (Number)
Ambiguity of authority (SCORP planner answers to citizens and supervisors in state government)	18.4	53.1	8.2	12.2	8.2	(0)
Redundancy of function (work of citizens overlaps with work of SCORP planners resulting in duplication of effort)	-	8.2	8.2	59.2	24.5	(0)
Special relationship Citizen participation encourages close relationship between SCORP planners and involved citizens	16.3	59.2	8.2	16.3	-	(0)
Delegate constitutional controls SCORP planners have right to develop selection procedures to determine which citizens to involve in public participation process	17.0	44.7	17.0	14.9	6.4	(2)
Administration vs policy-making SCORP planners should avoid direct participation in the political process	14.6	29.2	10.4	31.3	14.6	(1)
Views of citizen participation 1. Citizen participation should be limited because SCORP planners have expertise	4.1	14.3	6.1	51.0	24.5	(0)
2. Costs of citizen participation in SCORP planning outweigh benefits	-	12.2	24.5	44.9	18.4	(0)
3. Citizen participation in SCORP planning is impractical	-	4.1	10.2	51.0	34.7	(0)
4. A serious problem in SCORP citizen participation is reaching the average citizen	34.7	49.0	6.1	6.1	4.1	(0)

Another important issue in administrative decision-making is the dividing line between setting policy and administering policy. Especially in public participation policies, this line may blur. Recreation planners were asked whether they should avoid direct participation in the political process; responses were split on this issue.

Four other items examined attitudes of recreation planners toward citizen participation. Most state recreation planners did not share an elitist view of citizen participation. How feasible is citizen participation in recreation planning? Very few planners felt that the costs of citizen participation in recreation planning outweigh the benefits or that public participation is impractical.

Another issue or problem which has emerged in citizen participation conferences is how to increase the involvement of the "average" citizen, the person who is not represented by an organized group. The citizen with a special or vested interest is more easily identified and more likely to volunteer to participate. This issue was addressed in order to determine whether recreation planners perceived it as a serious problem, and a majority agreed that it is a problem of substance.

Conclusions

Several major conclusions may be drawn from this study. One of the purposes of the study was to discover what citizen participation techniques state recreation planners are using. Isolating six basic types of techniques, it was found that the public hearing, key interviews, public information programs and advisory committees were used more often than workshops or surveys. Other evaluative criteria which were used include: participation, representation, effect on policy, and information gained. It appears that citizen participation techniques differ in their appropriateness for a certain size of audience, type of activity, and the kind of audience reached. All the techniques were used as input into the setting of policy and occasionally served as the primary basis for policy. Generally, citizen participation techniques are most useful in identifying problems, but also assist in approving or rejecting aspects of policy.

The selection of planning objectives reveals a great deal about program emphases and values behind them. Recreation planners measure citizen preferences in order to establish state needs and demands. However, they are also concerned about a more informed public. Another common administrative goal is to gain citizen support for programs. Many planners are also anxious to utilize the human resources that citizens represent to supplement staff resources. Notable numbers of respondents were concerned about using citizen participation to reduce conflict and to fulfill legal requirements. These findings seem to support the conclusions of Sewell and Phillips (1979) who identified three conflicting objectives of public participation: high efficiency for the agency versus high degree of involvement by the citizens versus high degree of equity among the public.

The attitudes of state recreation planners toward characteristics of administrative citizen participation were examined. Generally, three of the four characteristics identified by Voth and Bonner (1978) were supported by the planners. Respondents were divided over whether recreation planners should avoid direct participation in the political process.

Planners seemed to feel that citizen participation in recreation planning is a legitimate and worthwhile activity, although they certainly recognize problems. One problem is trying to reach and involve the average citizen, rather than just the citizen with a vested interest.

The stages of planning in which citizen input is most valuable were identified as the generation of ideas and problems and the implementation of a policy plan. Time and cost constraints emerged as the major problems associated with citizen participation in state recreation planning. Other important problems were generating and sustaining public interest, and obtaining input which is representative and includes the average citizen. It seems likely that these problems are common to all administrative citizen participation efforts.

One important finding from this overview of citizen participation in state recreation planning is the great diversity of approaches and programs in existence. Programs seem to reflect characteristics of the state in which they are implemented. Planners recognize the importance of staying in touch with the values and attitudes of the citizens they represent.

It also appears that state recreation planners support the use of citizen participation, but there are varying degrees of commitment to it as a tool for decision-making. A public participation process tends to strain the already limited staff resources of most agencies responsible for the development of state recreation plans. Funds which are used for such programs are then not available for other purposes, such as acquiring land and developing local recreation facilities. However, the increasing emphasis on broad-based citizen participation at the federal level will eventually result in more extensive programs at the state level.

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Factors Associated with Different Programming Approaches*

by

C. L. Taylor and W. R. Summerhill
Institute of Food and Agricultural Sciences
University of Florida

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Introduction

The purpose of this paper is to discuss research findings concerning the personality variable "need for independence" and its association with Extension agents' approaches to educational programming. Major and minor educational programs are discussed as two approaches to programming.

Conceptual Orientation

The two approaches to programming require different amounts of resources. Major programming is based on the need for comprehensive resources from Extension and other agencies, organizations, industry, and volunteer leaders. The county-based Extension staff member must cooperate and work with a number of people to effect a major program. Usually minor programs can be conducted by the individual agent with a minimum amount of resources and involvement of other Extension agents and specialists. In the case of the minor program, generally, the agent working alone has the expertise to develop the program.

From a very basic and theoretical point of view, Maslow's theory of hierarchy of needs suggests that a person's decisions to act are based on what she or he needs (1970, pp. 35-46). Argyris also suggests that an employee of an organization takes a course of action based on his or her needs, goals, and abilities (p. 20, 1957). Thus, what needs do Extension agents have that influence their programming decisions? More specifically, does an agent's need for independence influence programming approaches?

Vroom (1959, p. 33) conducted a study of what personality variables predict about participation. He hypothesized that when an individual's need for independence is strong, he or she will have a more positive attitude toward the job if allowed to make decisions. Vroom's (1949, p. 34) data demonstrate that the effects of participation on the development of favorable attitudes vary directly with the strength of the participants' need for independence. That is, a person with a strong need for independence will hold positive attitudes about the job if permitted to participate in decision making. Barron (1953, pp. 163-172) found independents and yielders to be equally stable in their personality, but different in how they saw themselves. The independents felt they were original, emotional, and artistic. They said they preferred complexity and valued creativity, close interpersonal relations and valued the individual. The yielders thought they were obliging, optimistic, efficient, patient, and kind. They felt they were practical-minded and group oriented.

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The literature reveals many field and experimental studies on the effects of a person's personality on participation in various activities and his attitude toward his job. Thus, providing the basis to hypothesize the personality variable "need for independence" is associated with an Extension agent's approach to developing educational programs.

Methodology

Findings reported in this paper are the results of a larger study (Taylor 1975, p. 62) that dealt with different variables associated with agents' approaches to educational programming. Agents' previous year's plans of work had been subjected to a set of criteria (Taylor, 1975, Appendix D) and categorized into major and minor plans. Agents were asked to respond to five questions to arrive at their need for independence. The following is one of the questions:

> Assume you are working as a member of a group of your Extension colleagues, how much do you want the person in charge to tell you what to do?

_____very much
_____quite a bit
_____somewhat
_____a little
_____not at all

The index ranged from one (1) to five (5). That is, a respondent who checked "very much" on the above question has a low need for independence and has a raw score of 1 for this question. Each agent's raw score was determined. Those who ranged from 5-11 were considered to have a low need for independence; from 12-18, medium; and from 19-25, a high need for independence.

The reliability of each question was determined by Hoyt's (Baker, 1969) procedure. More specifically, the RAVE (Baker, 1969, p. 8) technique was used. The reliability coefficient for the battery of questions was .6819. The level of significance was established at .05. A measure of chi-square was used to test the hypothesis, "there is a relationship between programming approaches and agents' need for independence."

Results of the Study

Eighty-five county Extension agents responded to a battery of questions designed to determine their "need for independence." Only seven percent of the agents had a "low need for independence" and five percent had a "high need for independence." A majority, 88 percent, had a "medium level of need for independence." When these findings were compared with the kind of educational programs they developed, major or minor, there was no significant relationship.

Agents' Need for Independence by Programming Approaches

Level of Need for Independence	Minor No.	Minor %	Major No.	Major %	% of total	x^2	P
Low	3	50	3	50	7		
Medium	33	45	41	55	88	.07	NS
High	1	25	3	75	5		

There may be one explanation for a high percent of staff members exhibiting a medium level of need for independence. Agents recognize the value of other resource people and have traditionally worked with these people at the state and local level. With this background, agents may feel secure in their positions and not threatened by the assistance of other resource people.

Conclusions

Indepth programming philosophy suggests that a comprehensive set of resources is needed to bring about major change, especially when attacking the phenomenon from a problem-centered basis. Several Extension staff members, as well as people from other disciplines with various expertise, are brought together to work on solving the problem. This suggests that county-based Extension staff must cooperate and work with a number of people to conduct a major educational program.

Most of the agents in this study had a medium level need for independence and they were as likely to develop minor programs as major ones. Thus, there was no relationship between their need for independence and their approach to programming. However, most of these agents tend to be "yielders." They fall in the low to middle range of self-reliance and they are susceptible to the norms and pressures of other people. As pointed out earlier, they think of themselves as efficient, practical, and group-oriented. This leads us to suggest two implications of this study. One, if many agents are to build major programs, much of the leadership must come from state specialists, program leaders, administrators, and program development positions in Extension. And, it suggests that if strong leadership does not come from specialists concerning major programming that the agent may spend his/her time reacting to office and telephone calls and superficial problems. This suggests that they may have difficulty ordering their priorities and committing a large block of time and other resources necessary for the development of major programs.

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SESSION H

EDUCATION

TWO PATHS INTO HOME ECONOMICS: A STUDY OF BLACK AND WHITE WOMEN IN 1890 AND 1862 LAND GRANT UNIVERSITIES, Vickie LeNoir, Betty Stout, Treva Babcock, Anne Huber and Thomas A. Lyson, Clemson University and Winthrop College.

SOUTHERN URBAN AGGIES: A PRELIMINARY LOOK, F. Dale Parent and Wolfgang Frese, Mississippi State University.

STUDENT ACHIEVEMENT TEST SCORES IN ALABAMA: RURAL AND URBAN SCHOOLS, Mary Soderberg and John Dunkelberger, Auburn University.

TWO PATHS INTO HOME ECONOMICS: A STUDY OF BLACK AND WHITE WOMEN IN 1890 AND 1862 LAND-GRANT UNIVERSITIES*

Betty L. Stout
Anne L. Huber
Treva M. Babcock
WINTHROP COLLEGE

Thomas A. Lyson
Victoria R. LeNoir
CLEMSON UNIVERSITY

Leola Adams
SOUTH CAROLINA STATE COLLEGE

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Introduction

Recent surveys of home economics students in the South, specifically those attending the land-grant colleges and universities, have amassed descriptive data concerning student background, curriculum-related experiences, influential persons, and important factors in choice of major and educational and career goals and aspirations.

Previous studies produced separate profiles of students attending 1890 and 1862 colleges (Adams, Bocan, Molnar, Ohlendorf, & Dunkelberger, 1979). A combined profile was also produced of students attending both 1862 and 1890 colleges in South Carolina.

This paper is the report of a study to determine the relative importance of selected variables on choice of major which distinguish black women attending 1890 institutions from white women attending 1862 institutions.

A brief synopsis of the historical development of home economics will be presented as background and justification for a comparison of social origin, significant other, and curriculum-related experiences of home economics students attending 1862 and 1890 land-grant colleges.

The terms "1862" and "1890" refer to the years in which legislation known as the Morrill Acts was passed, establishing the land-grant colleges. The Morrill Act of 1862 produced colleges that were predominantly white. Although three states, Mississippi, Virginia, and South Carolina, attempted to share the benefits of the 1862 legislation with black institutions, the majority of southern states made no attempt to share funds until compelled to do so by the passage of the second Morrill Act in 1890 (Eddy, 1957). The 1890 Act, which held that maintenance of separate colleges for black and white students was in compliance, "sanctioned the establishment of a dual system of land-grant colleges in states which wanted them (seventeen southern and border states eventually chose a dual system)" (Southern Education Foundation, 1972, p. 70).

The effectiveness of the Acts for the 1890 black institutions has been hampered through the years due to lack of funding. Equitable division of funds rather than equal division was mandated, and "separate but equal" became "separate but unequal." As late as 1935-36, the black colleges received only six percent of the funds appropriated to the states for support of land grant colleges (Eddy, 1957). There is no doubt that opportunities for study in a wide variety of fields for black students have been curtailed on both economic and social grounds. Inequities in funding led to financial, staffing, and enrollment problems, thereby limiting the scope of programs. Despite the inequities, the 1890 land-grant colleges have succeeded "through the conviction and determination of a core of hard working educators" (Eddy, 1957, p. 264) in making a significant contribution in higher education.

The Morrill Acts of 1862 and 1890 resulted in making higher education more readily available to the masses by meeting the need for a more "practical education" and by giving "recognized status" to applied sciences and technical and vocational education (Thackrey, 1974). The Acts established a respected place in American education for study in engineering, science, agriculture, home economics, and veterinary medicine (Eddy, 1957).

Tha land-grant movement was in part responsible for giving "genuine acceptance to the notion that women could study on the same campus as men" (Eddy, 1957, p. 61). Home economics, which was known by several names including domestic science in its early development, was one of the applied sciences that grew as a result of land-grant college funding. In 1890, only four land-grant colleges offered domestic science. By 1900, nine institutions were offering courses in "domestic economy." By 1905, the number had grown to 18; by 1928, to 42 (Eddy, 1957).

The growth of home economics and the determination of curriculum varied widely throughout the land-grant colleges basically because of socio-economic factors of the various regions (Fritschner, 1977). In the northeast, home economics started as cooking schools to help immigrants and to solve the difficulty of finding servants. The beginning emphasis of home economics in the northeastern land-grant colleges was the preparing of women for personal reasons rather than for a profession in home economics. In the midwestern and western states, the home economics programs were designed for middle and upper-middle class women. Their purpose was to encourage traditional values and norms concerning the role of women. In the South, the values of a predominantly agrarian society precluded the adoption of home economics in the 1862 land-grant colleges (Fritschner, 1977). Therefore, home economics was first associated with the 1890 institutions in the southern region. In 1905, approximately two-thirds of all colleges offering household science in the southeast were 1890 schools (East, 1980).

Early home economics curricula, influenced by economic and political realities, varied in 1862 and 1890 schools with the curriculum in black schools being more practical for the training of domestic workers and in the white schools tending to emphasize the liberal and professional aspects of home economics (Ralston, 1978).

Home economics has attempted to change as society has changed and as households have changed, resulting in fewer regional distinctions in college home economics programs. Milestones in the effort to define the purpose and direction of the profession include the Lake Placid Conferences, the first of which was in 1901; the French Lick meeting of 1961; the Home Economics Defined meetings which began in 1979; the development of membership criteria for the American Home Economics Association; the recent discourse regarding the philosophical base for the profession; and, publications such as "Home economics: New directions". These and other efforts have been reflected in college-level programs and content.

Given the agreement, broadly speaking, of the definition of home economics and a decline of regionalism in college home economics programs, a question arises as to why students choose to major in home economics at an 1862 or an 1890 institution. Obviously, there are a multitude of cultural, social, economic and other responses for maintenance of the dual land-grant systems in the southern region.

This paper will attempt to show ways in which the home economics students responding to a questionnaire during the spring of 1977 in 1862 and 1890 institutions were significantly different in terms of social origin, significant persons who influenced them to major in home economics, and curriculum-related experiences. The variables which distinguished the two groups of students were rank ordered separately for social origin, significant others, and curriculum-related experiences. Finally, the relative importance of all the combined significant independent variables was determined.

The researchers do not intend for this paper to be invidious in the presentation of the distinctions of black and white home economics students. It is a fact that 92 percent of the students majoring in home economics in 1862 schools are white, while 95 percent of the students majoring in home economics at 1890 schools are black or non-white according to Adams, et al., (1979). The intent, therefore is that reciprocal understanding will pave the way for continued profitable cooperation in research and in the formulation of objectives for both 1862 and 1890 schools.

Although men are not excluded from professions in home economics, enrollment in home economics is still largely composed of women. Therefore, this paper will address the characteristics of women.

Analytic Strategy

A stepwise form of discriminant analysis, based on the maximization of F-ratios between groups and minimization of Wilk's lambda (Klecka, 1975) will be used to statistically identify a set of variables that distinguish white women attending predominantly white 1862 land-grant institutions from black women in predominantly black 1890 schools. Our analytical approach was twofold. First, three separate discriminant analyses, one for each set of independent variables, will be reported. Second, those independent variables shown to be statistically significant within each set will be entered into a combined discriminant analysis. Taken together, our analyses should lead to a better understanding of the factors and conditions that lead black and white women toward careers in home economics.

Study Population

Data for this study are from Southern Regional Research Project S-114 Defining and Achieving Life Goals: A Process of Human Resource Development. One part of this project subtitled "A Regional Study of Higher Education in Agriculture and Home Economics in the South" deals with the determination of background characteristics and career planning strategies of students attending southern colleges of agriculture and home economics. Data for this part of the regional project were collected in the spring of 1977 from home economics students enrolled in all 1862 and 1890 land-grant institutions in 14 southern states. In four states (Florida, South Carolina, North Carolina and Texas), either because of low home economics enrollment or lack of a home economics program, schools other than the land-grant institutions were sampled. The land-grant schools in these four states were replaced by Florida State University, Winthrop College (which serves a land-grant function in South Carolina), University of North Carolina at Greensboro, and Texas Tech University.

The sampling frame was determined by asking the deans of home economics at each school to provide the S-114 researchers with lists of names, addresses, and academic ranks of currently enrolled students. These lists were then edited to delete students classified as either special students or graduate students. From these lists a fifteen percent random sample for the colleges of home economics at 1862 land-grant universities (or their substitutes) was drawn. Because of their lower average enrollments and anticipated lower overall return rates, a total sample of 1890 students was taken (Howell &

Parent, 1979).

In most cases, questionnaires were mailed to respondents. However, at some of the smaller schools, data collection was coordinated through a campus representative. Two mail followups and one direct contact were used to improve response rates. The response rates were: 77.3 percent (N=1126) for 1862 colleges of home economics; and 58.1 percent (N=1352) for 1890 colleges of home economics.

To keep analytical and comparative problems to a manageable size, we will deal only with the white female portion of the study population attending 1862 colleges of home economics (N=1005) and the black female portion of the study population attending 1890 colleges of home economics (N=1198).

Dependent variable

School choice is a dichotomy separating white women currently enrolled in an 1862 home economics program from black women enrolled in an 1890 home economics program.

Independent variables

Eight social origin variables were examined. *Father's educational attainment* and *mother's educational attainment* were coded into eight categories from 1) less than nine years of formal schooling to 8) graduate work after college. *Father's occupational status* was coded according to the occupational status scheme developed by Nam, LaRocque, Powers & Holmberg (1975). Status scores range from 00-99. *Family income* was reported in nine categories from 1) less than $5000/year to 9) over $100,000/year. *Mother's work status* is a trichotomy: 1) working full-time; 2) working part-time; 3) not working. *Father's political preference* and *mother's political preference* are coded into five categories from 1) conservative to 5) liberal. *Childhood residence* was a six category code ranging from 1) farm or ranch to 6) a large metropolitan city (over 500,000 in population).

To determine the structure and importance of significant other influence, the following list of 17 individuals was presented to each respondent: *mother, father, brother, sister, other relative, high school friend, high school counselor, county extension agent, home economics teacher, vocational agriculture teacher, other teacher or principal, college friend, college teacher or advisor, former student, dean or associate dean of agriculture or home economics, veterinarian, clergyman.* The respondents were asked to indicate how influential each of the individuals on the list had been in helping them choose their present college major. Response categories were: 1) no influence; 2) some influence; 3) very influential.

Five items were used to index previous curricula-related educational and work experiences. Three of the items were of the form: "Please indicate how important the following things were in choosing your present major: 1) *successful prior experience in home economics;* 2) *had a course related to this in high school;* 3) *had a course related to this in college.*" Responses to these items were: 1) not important; 2) important; 3) very important. The remaining two items were derived from the following question: "While enrolled in high school, did you participate in any of the following activities? 1) *4-H;* 2) *Future Homemakers of America (FHA).*" Response categories were: 1) did not participate; 2) participated; 3) participated as a leader.

Results

Social origins. A between-groups comparison of means (Table 1A) showed that all social origin variables except mother's occupation were significantly related to school context (e.g., predominantly white 1862 colleges or predominantly black 1890 colleges) for southern women in home economics. Especially significant differences between groups were apparent for father's occupation, parents' income, father's education, and mother's education while lesser though still significant, differences were found for father's political preference, size of childhood residence, and mother's political preference.

Table 1A
Means and Standard Deviations of Social Origin Variables
for White and Black Women in Home Economics Curriculums

	White Women (N=1005)		Black Women (N=1198)		Univariate	
Social origin variables	Mean	(SD)	Mean	(SD)	F	P
Parents' yearly income	5.03	(1.62)	2.89	(1.49)	454.30	<.00
Father's occupational status	72.02	(24.00)	39.75	(25.16)	428.05	<.00
Father's political preference	2.21	(.92)	2.68	(1.11)	55.07	<.00
Father's educational attainment	5.82	(1.99)	3.28	(2.20)	366.82	<.00
Size of childhood residence	3.46	(.94)	3.23	(1.07)	13.69	<.00
Mother's work status	2.08	(.95)	1.99	(.96)	2.14	>.14
Mother's political preference	2.32	(.92)	2.79	(1.14)	53.21	<.00
Mother's educational attainment	5.40	(1.66)	3.83	(2.19)	17.29	<.00

When the entire set of variables was entered into a discriminant analysis (Table 1B), all factors (parents' income, father's occupation, father's political preference, father's education, size of childhood residence, mother's work status, mother's political preference, and mother's education) combined to form one discriminant function. Interestingly, parents' income, father's occupation, and father's political preference emerged as the most important discriminating variables. The relative importance of these three factors, along with the other social origin variables, suggested that white home economics students attending 1862 schools differed from their black counterparts enrolled in 1890 colleges primarily in terms of family income and their father's socio-economic characteristics. Generally speaking, black students come from significantly lower socio-economic origins than their their white peers.

The final lambda (.567) and canonical correlation (.658) for our discriminant analysis (Table 1B) indicated that social origins were relatively important in differentiating 1890 from 1862 home economics students. This supported the contention, based on previous research, that the two study populations come from significantly different socio-economic backgrounds.

Table 1B
Stepwise Discriminant Analysis of Social Origin Variables

Social origin variables	Step	Wilk's Lambda	Multivariate F	Significance of change	Standardized Discriminant Coefficient
Parents' yearly income	1	.698	454.30	.000	.481
Father's occupational status	2	.628	310.10	.000	.459
Father's political preference	3	.603	229.65	.000	-.214
Father's educational attainment	4	.585	185.88	.000	.287
Size of childhood residence	5	.573	155.66	.000	-.226
Mother's work status	6	.570	131.40	.000	.130
Mother's political preference	7	.568	113.28	.000	-.123
Mother's educational attainment	8	.567	99.59	.000	.094

Note. Canonical Correlation = .658 P <.000

Significant others. Turning to significant other influence, Table 2A shows that family members (e.g., sister, father, mother), home economics deans and teachers and college friends manifested the greatest influence on 1862 and 1890 female home economics students. Mothers were the most influential. However, notable differences between groups were evident in the influence manifested by vocational agriculture teacher, high school friend, former student, college teacher or advisor, and other teacher or principal. Lesser, though significant differences were found for college friend, clergyman, mother, veterinarian, and county extension agent (Table 2A, p. 7).

When the entire set of significant others was entered into a discriminant analysis (Table 2B), all but two (veterinarian and county extension agent) combined to form one discriminant function. Interestingly, sister, vocational agriculture teacher, father, home economics dean, other relative, and brother emerged as the most important discriminating variables. The relative discriminant importance of these six individuals, when placed in the total context of significant other influence, suggested that white home economics students attending 1862 schools differed from their counterparts enrolled in 1890 colleges essentially in terms of the type and magnitude of family related influence. Generally speaking, family relations (sister, brother, and other relatives) were more important sources of influence for the black students than they were among the white students. The final lambda (.792) and canonical correlation (.456) in Table 2B indicated, however, that significant others played a less important role differentiating 1862 and 1890 women in home economics than did social origin factors (Table 2B, p. 7).

Prior curriculum-related experiences. Table 3A shows that prior school and work experiences also manifested some discriminating power between 1862 and 1890 female home economics students. For the 1890 students, prior home economics experiences, high school courses, and participation in FHA was deemed more influential in their choice of home economics than they were for 1862 students. For all of these factors, black means were significantly high-

Table 2A
Means and Standard Deviations of Significant Other Influence for White and Black Women in Home Economics Curriculums

Significant other	White Women (N=1005)		Black Women (N=1198)		Univariate	
	Mean	(SD)	Mean	(SD)	F	P
Sister	1.31	(.57)	1.76	(.80)	126.26	<.00
Voc. ag. teacher	1.05	(.29)	1.29	(.61)	72.53	<.00
Father	1.68	(.71)	1.65	(.76)	.46	>.50
Home economics dean	1.09	(.32)	1.33	(.64)	69.17	<.00
Other relative	1.28	(.56)	1.66	(.77)	96.41	<.00
Brother	1.19	(.47)	1.54	(.70)	106.00	<.00
Home economics teacher	1.52	(.73)	1.85	(.83)	56.37	<.00
College friend	1.49	(.68)	1.61	(.76)	9.20	<.00
High school counselor	1.21	(.49)	1.52	(.74)	77.55	<.00
High school friend	1.27	(.52)	1.58	(.71)	75.00	<.00
Former student	1.25	(.53)	1.42	(.70)	23.54	<.00
College teacher/adviser	1.46	(.70)	1.63	(.80)	14.35	<.00
Clergyman	1.06	(.27)	1.11	(.37)	7.34	<.00
Other teacher or principal	1.29	(.58)	1.54	(.75)	41.94	<.00
Mother	1.93	(.70)	2.07	(.82)	11.39	<.00
Veterinarian	1.03	(.19)	1.05	(.27)	4.15	<.04
County extension agent	1.11	(.41)	1.21	(.54)	12.33	<.00

Note. Very influential = 3; Some influence = 2; No influence = 1

Table 2B
Stepwise Discriminant Analysis of Significant Other Influence

Significant other variables	Step	Wilk's Lambda	Multivariate F	Significance of change	Standardized Discriminant Coefficient
Sister	1	.910	126.26	.000	.090
Voc. ag. teacher	2	.885	82.47	.000	.468
Father	3	.867	65.06	.000	-.340
Home economics dean	4	.845	58.15	.000	-.374
Other relative	5	.829	52.30	.000	-.270
Brother	6	.819	46.70	.000	-.185
Home economics teacher	7	.811	42.16	.000	-.180
College friend	8	.805	38.27	.000	-.270
High school counselor	9	.802	38.83	.000	-.227
High school friend	10	.799	31.81	.000	.090
Former student	11	.797	29.31	.000	.186
College teacher/adviser	12	.795	27.11	.000	.114
Clergyman	13	.794	25.24	.000	.110
Other teacher/principal	14	.793	23.54	.000	-.375
Mother	15	.792	22.05	.000	.106

Note. Canonical Correlation = .456 P < .000

er than white means. Only the influence of college home economics course(s) showed little ability to differentiate among groups.

Table 3A
Means and Standard Deviations of Prior Curriculum Related Experiences for White and Black Women in Home Economics Curriculums

Prior curriculum-related experience	White Women (N=1005)		Black Women (N=1198)		Uni-variate	
	Mean	(SD)	Mean	(SD)	F	P
High school home economics course(s)	1.56	(.74)	1.95	(.83)	97.17	<.00
FHA	1.54	(.77)	1.84	(.77)	54.60	<.00
4-H	1.28	(.63)	1.44	(.67)	20.83	<.00
College home economics course(s)	1.59	(.78)	1.64	(.77)	1.59	<.20
Successful prior experiences in home economics	1.86	(.82)	2.02	(.86)	14.93	<.00

Table 3B
Stepwise Discriminant Analysis of Prior Curriculum-Related Experiences

Prior curriculum-related variables	Step	Wilk's Lambda	Multi-variate F	Significance of change	Standardized Discriminant Coefficient
High school home economics course(s)	1	.941	97.17	.000	-.843
FHA	2	.927	60.41	.000	-.376
4-H	3	.924	42.23	.000	-.227
College home economics course(s)	4	.922	32.69	.000	.180
Successful prior experiences in home economics	5	.921	26.37	.000	.106

Note. Canonical Correlation = .280 P < .000

Combined discriminant analysis. In an effort to derive a more complete set of factors that discriminated between 1862 and 1890 female home economics students, the 30 significant discriminating variables identified in Tables 1B, 2B, and 3B were placed into a combined discriminant analysis. These findings (Table 4) disclosed that social origin variables such as father's education and parents' income were the most important set of factors separating the two study populations.

Three other social origin indicants, father's occupation, father's political preference, and the size of the student's hometown, also displayed important discriminating power. Of secondary, though significant importance were the influences of a host of significant others. The most important significant other which discriminated between the two groups was the high school counselor. Only one prior curriculum-related experience, high school home economics course(s), emerged as an important discriminating factor in the combined analysis.

Table 4
Stepwise Discriminant Analysis of Social Origin Variables, Significant Other Influence and Prior Curriculum-Related Experience

Variable name	Step	Wilk's Lambda	Multi-variate F	Signifi-cance of change	Standardized Discriminant Coefficient
Father's education[a]	1	.649	241.4	.000	-.321
Parents' income[a]	2	.568	169.3	.000	-.355
Counselor[b]	3	.545	123.7	.000	.173
Father's occupation[a]	4	.529	93.9	.000	-.375
Father's political preference[a]	5	.513	84.0	.000	.193
Size of childhood residence[a]	6	.506	72.0	.000	.185
Prior curriculum-related experience[c]	7	.498	63.5	.000	.181
Mother's education[a]	8	.492	56.9	.000	-.205
Other relative[b]	9	.486	51.6	.000	.156
Home economics dean[b]	10	.484	46.8	.000	.130
Former student[b]	11	.481	42.8	.000	-.108
Clergyman[b]	12	.480	39.4	.000	-.094
Sister[b]	13	.478	36.5	.000	.092

Note. Canonical correlation = .722 P <.000

[a] Social origin variable
[b] Significant other variable
[c] Prior curriculum-related experience variable

Summary and Conclusions

This study focused on statistically identifying a set of variables that distinguished white women attending predominantly white 1862 land-grant institutions from black women attending predominantly black 1890 institutions. Independent variables were related to the social origins, significant individuals who influenced home economics majors and the effect of curriculum related experiences on the choice of a major in home economics.

White home economics students attending 1862 schools in the Southern region were shown to differ from their black counterparts enrolled in 1890 schools primarily in terms of family income and father's socio-economic characteristics. Generally speaking, the findings showed that black home economics students come from significantly lower socio-economic origins than their white peers. The father's occupation was found to be one of the discriminating variables of those denoting social origin. The finding is not surprising. Occupational status has been shown to characterize similarities and differences in stratification systems within the social structure (Nam et al., 1975).

Literature supported the idea that home economists tend to come from lower and lower-middle class origins in terms of parents' educational attainment and occupation (Rose, 1951; Murphy & Bosard, 1956; Regan & Thompson, 1965; Lorenz, 1970; cited in East, 1980). Studies also support the notion that lower socio-economic class black and white students are directed to vocational courses (East, 1980). It appears then that the home economics profession in general reaches the lower and lower-middle social level individual with this tendency being stronger in 1890 than 1862 schools.

The finding that 1890 students had lower socio-economic origins may simply reflect the general social milieu of the South, rather than a characteristic of home economics programs or particular students. Apparently both white and black students have viewed a choice of home economics as an opportunity for upward mobility. East (1980) reported that most home economists come from families where the parents did not attend college and where the income was average. Lower-middle and upper lower classes typically chose professions such as teaching, nursing, social work or library science as a means of becoming upwardly mobile according to Etzioni (cited in East, 1980). Black students in 1890 institutions have experienced upward mobility at a slower rate than whites as evidenced in the occupational status and income of the fathers in each group.

In spite of differences found in the present analysis, programs in the 1890 schools appeared to be "making education available to the masses" as intended by the Morrill Acts (Thackrey, 1974).

Although in education, segregation and discrimination issues remain a central concern, certain values can be found in retaining origins. The authors of the Southern Education Foundation report, "Small change: A report on Federal support of black colleges" affirmed that black schools offer a refreshing diversity and have a unique contribution to make, suggesting that freedom of choice be maintained.

East (1980), a leader in the home economics profession, has observed that "students seem to have a sixth or seventh sense about a college culture because they usually pick one which suits their own needs". School faculty and administrators, therefore, should know and consider the backgrounds of their students in planning programs.

The differentiation between 1862 and 1890 home economics students in terms of who influenced them to choose home economics as a major was based on an array of seventeen significant others included in the questionnaire. Black students were influenced more in the selection of a home economics major by significant others than were white students. Generally speaking, the influence of family relatives on the choice of a major was more important for black home economics students than for white home economics students.

Membership in 4-H and in the Future Homemakers of America (FHA) organization as well as the influence of a high school course or other successful experience in home economics, differentiated between 1890 and 1862 students, each being more important to black students than to white students.

When all 30 significant variables were combined, social origin variables, father's education and parents's income, were the most important variables separating the two populations. The third most important variable differentiating the groups was a significant other variable, high school counselor. Counselors had more influence on black students in home economics than on the white students.

The only curriculum related variable in the combined analysis which differentiated the two groups was the influence of high school home economics courses. Assuming that counselors have an impact on who takes particular courses, the importance of home economics courses in the choice of a major by black students is expected. If counselors place more black students in high school home economics classes, it follows that home economics courses would have a greater influence on black students. Additional study regarding the high school counselors and their role in counseling home economics students is needed.

This paper represented an initial attempt to examine an area of home economics which has not previously been explored. Additional studies, such as those regarding program offerings, student aspirations and goals, and student attitudes, would help create a balance in drawing conclusions regarding the findings reported.

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SOUTHERN URBAN AGGIES: A PRELIMINARY LOOK *

by
F. Dale Parent
and
Wolfgang Frese
Mississippi State University

INTRODUCTION

In recent years most colleges and universities throughout the nation have experienced a stabilization of enrollment, and in some instances, a decline in enrollment. However, colleges of agriculture within universities have at the same time enjoyed substantial growth. According to the National Association of State Universities and Land-Grant Colleges, "ag" school enrollment increased 181% between 1963 and 1976 (Thompson, 1976). Sledge (1977) reports an increase in undergraduate enrollment from 32 thousand in the early 1960's to 98,183 in 1976. Although in the last year or two this rapid growth may have subsided somewhat, the overall trend is upward. As stated by Darrell Metcalfe (1977:94):

> There no doubt may be ups and downs in (colleges of agriculture) enrollment in the future, both actual and in comparison with the total enrollment in higher education, but the overall trend should continue upward.

The primary source of higher education in agriculture originates from the nation's land-grant universities. The majority of these institutions were established by the Morrill Act of 1862. A similar act (Morrill Act of 1890) created black land-grant universities in seventeen southern and border states. The black institutions were "usually associated with the cash crop of the area" (Seals, 1977: 109).

Initially, instruction in agriculture was of the "classical" nature (Poffenberger, 1977). "As time went on, some criticized professors of agriculture for being impractical, calling them 'book farmers'" (Kellogg and Knapp, 1966:11). However, with advances in agricultural technology, training in these institutions developed a more practical "how to farm" orientation. These academic institutions provided farmers with increased technology and practical techniques for improving farming skills.

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As advanced technology entered farming, supporting occupations made "agriculture" a word implying much more than simply the raising of crops and livestock. A vast array of farm related enterprises developed. The actual number of individuals directly involved in farming has dropped dramatically throughout our nation's history so that today farmers comprise only five percent of the population. However, with the development of nonfarm agricultural enterprises, many people employed in the agricultural sector of the American economy are not farmers. Those engaged in nonfarm agriculture account for about one-third of the American labor force (Hassinger, 1978). Therefore, while farming has decreased per se, the scope of American agriculture in its entirety has been increasing.

Today's agriculture is not restricted to those who reside in rural areas. In fact, city-dwellers are now involved in more nonfarm [illegible]lture than are rural residents (Kellogg and Knapp, [illegible]).

Since the inception of the first "ag" schools over a hundred years ago the population of the United States has undergone a dramatic change. The first census of the United States, taken in 1790 revealed an urban population of only five percent, thus 95 percent of the nation lived in rural areas (Taylor and Jones, 1964). This previously predominantly rural nation is now three-fourths urban with only five percent engaged in farming (Hassinger, 1978). Despite this population trend, "ag" schools across the nation have not only survived, but have recently experienced phenomenal growth. What is even more intriguing is the surge of traditionally nonexistent women and urban "ag" students. "At one time the typical student enrolled in the agricultural and natural resource curricula in colleges of agriculture was a farm-reared male" (Doerr and Kroening, 1977:149). However, a recent survey of administrators in colleges of agriculture found a change in the formerly homogeneous "ag" school population. The findings reveal a much more heterogeneous student body with large increases in the enrollment of women and urbanites (Sledge, 1977). Darrow (1977) notes that in 1973-1974 land-grant colleges of agriculture had a female enrollment of 19 percent, with this figure rising to 28 percent in 1976-77. This constitutes an increase of 47.4 percent in three years. However, it should also be noted that, in general, the percentage of women enrolling in institutions of higher learning has increased rapidly since 1970 (Darrow, 1977). While actual figures on the rise of urban residents' participation in agricultural schools are virtually nonexistent, much current literature has noted this surprising development (Sledge, 1977; Doerr and Kroening, 1977; Mowrer and Folks, 1977; Boyd and Pettigrew, 1977).

Although the recent influx of urbanites may be somewhat confusing, for many years colleges of agriculture have made attempts to keep pace with changes in American society and the expanding non-farm agricultural sector. A sudden realization of this by the public may, in part, account for the expanded urban participation. Sledge (1977:46) cites two agricultural school administrators who reveal some institutional reaction to the increased number of nontraditional students:

> Many institutions have broadened the curricular offering for agricultural and natural resources students.[1]
>
> Other institutions have a greater flexibility or liberalization of program requirements, with more attention being given to urban background and women students' educational needs.[2]

This is not to imply that the standard curricula of the early "ag" schools have been discarded. On the contrary, they remain a vital part of these institutions. However, many non-traditional majors such as forestry and wildlife management, veterinary medicine, and landscape architecture have been added to their curricula. Also, many of the biological sciences are now being offered in colleges of agriculture.

This paper examines differences between urban and rural "aggies". In particular, variations in the following characteristics will be considered: (1) size of father's and mother's childhood place of residence; (2) education experience; (3) educational aspirations and expectations; (4) major field of study; (5) work experience; (6) occupational aspirations and expectations; (7) residential preference. Special attention is paid to the type of majors attracting urban students in colleges of agriculture.

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[1] Bennett, William F. Associate Dean, College of Agricultural Science, Texas Tech University, Lubbock, TX, 1976. Personal Communication in Sledge (1977).

[2] Ronning, Magnar. Associate Dean, College of Agricultural and Environmental Science, University of California, Davis, CA, 1976. Personal communication in Sledge (1977).

METHODOLOGY

The Data

The data used in this investigation are from a project entitled: "Regional Study of Higher Education in Agriculture and Home Economics in the South." This endeavor is part of a larger study, "Defining and Achieving Life Goals: A Process of Human Resource Development" (Project S-114), which is supported by USDA - SEA/CR.

The "Regional Study of Higher Education in Agriculture and Home Economics in the South" collected data from a sample of students enrolled in colleges of agriculture and home economics in both "1862" and "1890" land-grant universities in the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. Also included were Texas Tech University and Tuskegee Institute for their prominent roles in agriculture (see Table 1). Data collected from students majoring in home economics are not used in the present analysis.

A 15 percent random sample stratified by school was selected in the "1862" institutions and Texas Tech. However, because of the smaller size of "1890" institutions and the Tuskegee Institute, all of their students enrolled in agriculture were included. The data were collected during the spring of 1977 via mail questionnaire. The total agricultural student population was 24,385, resulting in a sample size of 4,924. The final return yielded information on 3,417 "ag" students. However, for purposes of this investigation only those persons classified as undergraduate "ag" majors who identified their race as either black or white are included. Thus 3,075 students are used in this investigation, 93.8% of them are white and 6.2% black. (For a detailed discussion of the sampling procedures, see Howell and Parent, 1979).

Treatment of Missing Values and Sample Weighting

Although missing responses can be handled by several different methods (see Hertel, 1976, Babbie, 1973; Lansing and Morgan, 1971.), we assigned race-sex subgroup means for each variable. Note, however, that the regression anlysis utilizes pairwise deletion procedures.

A stratified random sample by school can, in many cases, have advantages over a simple random sample (see Lazarwitz, 1968; Kish, 1965; Cochran, 1963). Stratification is usually used to enhance the representativeness of a sample. Since this sample is stratified by school, gains in precision will be greatest for those variables most closely related to between-school difference. Because of differential sampling rates between 1862 and 1890 institutions and because of differential response rates across all strata (schools), to construct a representative "ag" sample for the region as a whole, a weighting procedure is used. The weighting procedure (See Table 1) was designed to "expand" and "contract" individual stratum, while retaining the original size. (For sampling details, see Howell and Parent, 1979).

Operationalization of the Variables

A student's place of residence is measured by the size of the community he (she) reported living in most of his (her) life. The responses are coded into rural farm, rural nonfarm (town or village under 10,000 in population or open country nonfarm), and urban. The residential preference of a student after college, as well as the size of the respondent's father's and mother's childhood place of residence, utilize the same response categories employed for the student's place of residence.

The formal agricultural educational experience of a respondent is measured by whether or not he (she) took one or more agriculture courses in high school. A student's educational aspiration is a measure of the amount of formal education a student would obtain if he (she) were completely free to choose. The educational expectation of the respondent measures the actual amount of formal education expected.

A student's major field of study is a traditional - nontraditional dichotomy of the first response to the question eliciting the respondent's major or area of concentration. The answers were coded into the traditional-nontraditional major dichotomy based upon the breakdown presented in Table 2. (For details on how the dichotomy was developed, see Parent, 1979 and Kellogg and Knapp, 1966).

Work experience measures whether or not a student has engaged in agriculturally related work either at home or for pay elsewhere. Occupational aspiration is the job a student would enter if he (she) were completely free from constraints. Occupational expectation is the occupation a student actually expects to engage in most of his (her) life. Both aspirations and expectations are coded into an agriculture - nonagriculture occupation dichotomy. (See Parent, 1979:22-23 for details).

FINDINGS

A brief description of the respondents in the sample shows that about 57% of the 3,075 students are from urban areas, indicating that urbanities comprise a majority of the students in southern colleges of agriculture. A closer look at the rural students reveals that 47.1% of them come from farms and the other 52.9% from rural nonfarm areas.

Males, who make up about seventy-five percent of the agriculture student body, are about evenly divided with respect to rural or urban residential backgrounds. Of the rural males, about half are from farms and the remainder from open country or small town residences.

Women comprise 27.0% of the agriculture school sample; this is consistent with the 28.0% figure obtained by Thompson (1976). The rural-urban composition of the females is extremely interesting. About 71% of the women are from urban areas with only 29% coming from rural residences; of the latter, approximately 40% are from farms.

Table 3 compares the childhood residences of parents with the current hometown residences of students which, in most cases, is also their parents' current residence. The results, as expected, indicate that since their childhood a majority of the parents (both fathers and mothers) have moved to more urban areas while those reared in urban areas have tended to remain there.

Education: Experiences, Aspirations, Expectations and Area of Study

Table 4, comparing rural and urban agriculture students by whether or not they took any agriculture courses in high school, indicates that a majority (54.3%) of the students from farms took at least one agriculture course in high school. This figure drops to about 36% for those living in rural nonfarm areas and to around 10% for urbanites. As expected from the status attainment literature (e.g. see Middleton and Grigg, 1959; Elder, 1963; Sewell, 1964; Burchinal, 1966; Hassinger, 1978; and especiallly Boyd and Pettigrew, 1977), educational aspirations and expectations of the respondents are linked to their current place of residence. The results in Tables 5 and 6 indicate that agriculture students from urban areas both aspire to and expect more education than those from rural areas. Rural farm youth have the lowest educational aspirations and expectations.

Table 8 shows that type of major selected by agriculture students. Sixty two percent of the students are in traditional fields of study (see Table 8) while the other 38% are enrolled in areas not traditionally offered in colleges of agriculture. As can be seen from the results in Table 8, over 80% of the students who live on farms are majoring in traditional areas. This figure drops to 63% for rural nonfarm residents and to about 54% for urban students.

Work Experience and Occupational Aspirations and Expectations

A surprisingly large percentage (78%) of students have had some agricultural work experience. This figure ranges from a low of 66.2% for urban students to almost 100% of the rural farm youth. The occupational aspiration and expectation results, see in Tables 9 and 10, are virtually identical; that is, farm youth are more likely to aspire and expect agriculture occupations than either rural nonfarm or urban students. Although urban students had the smallest percentage aspiring and expecting to enter agriculture occupations, these figures still exceed 77%.

Residential Desires After College

Although as a group, southern agriculture students are about equally split in their residential aspirations, these preferences vary by residential background. (see Table 11). That is, students from farms show a preference to eventually live on a farm; those from rural nonfarm areas to remain in such areas and those living in cities to settle in urban areas. This is consistent with the finding of Fuguitt and Zuiches (1975:499) that ". . . current residence has an important effect in that people who live in an area are more likely to prefer it than people who do not. . ." It appears that this relationship is strongest for those agriculture students residing on farms.

SUMMARY AND DISCUSSION

Summary

In sum, we found that a majority (57%) of the students enrolled colleges of agriculture in the South are from urban areas. For males this figures reduces to about 50%, however, it increases to 71% for women. As expected, experience with agriculture courses in high school was greatest for farm reared youth and lowest for those residing in urban areas. The educational aspirations and expectations varied as expected (e.g., Middleton and Grigg, 1959; Elder 1963; Sewell, 1964; Burchinal, 1966; Hassinger, 1978; Boyd and Pettigrew, 1977), that is, the more rural a student's residence the greater the chances that he (she) will have lower educational aspirations and expectations. Although a majority of the students (irrespective of place of residence) are enrolled in traditional agricultural majors; those residing on farms are most likely to select such an area of study while those from urban areas are the least likely candidates.

The fact that 78% of the urban students enrolled in colleges of agriculture have had some agricultural work experience was somewhat of a surprise. The trend between place of residence and work experience in agriculture is as expected, the more rural the place of residence the larger the percentage of students who have had agricultural jobs. This trend also holds for the occupational aspirations and expectations when these are dichotomized into agriculture and nonagriculture. Although for the total sample residential aspirations were about equally split, our results by current place of residence are as expected (Fuguitt and Zuiches, 1975). That is, like other people agricultural students show a preference for living in an area similar to the one in which they currently reside.

Discussion

Findings on students' "choice of majors," indicate that urban students are more likely than their rural counterparts, particularly those from farms, to choose nontraditional majors in agriculture. Focusing on nontraditional majors our findings show that urbanites comprise at least 60% of the students enrolled in these five majors. Therefore, it can be concluded that although these nontraditional fields of study are not the sole reason urban students choose agriculture in college, they do play an important role. Although nontraditional majors can be considered a "drawing card" for city-dwellers, urban students are not totally avoiding traditional majors. Consequently, instructors of traditional fields of study must continue to be prepared for students without a rural background. In conclusion, the continued expansion and "liberalization" of "ag" school curricula appears valid; however, this should not be done at the expense of traditional majors.

In order to determine which variable or set of variables best explain a student's choice of a traditional or non-traditional major,[3] we did a stepwise regression analysis using type of major as our dependent variable and the rest of the variables in this paper as predictors.[4] The results indicate an R^2 of about 13% most of which (about 12%) is due to three variables, namely, whether or not the student had some agricultural work experience, educational expectations, and whether or not the student had taken an agriculture course(s) in high school. Thus those students with agricultural work experience, "low" (no graduate work) educational expectations and one (or more) high school agricultural course are the ones most likely to enter traditional majors.

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[3] It should be noted that for the regression analysis the original answer categories were used for all of the residential variables. As a result these answers have a six rather than a three point rural to urban continuum.

A majority of both rural and urban students aspire and expect agricultural occupations after the completion of their schooling. However, while it is true that the agricultural aspirations and expectations are higher among rural students, particularly rural-farm students, these differences are not great. Unfortunately, the type of work actually obtained after a student graduates is not available in our data set. It should also be noted that the term "agricultural occupation" as used here does not refer only to farming. Since approximately 30% of the labor force is employed in agriculture, colleges of agriculture will continue to have an influence on the American economy. Because urbanites are playing an ever larger part in colleges of agriculture, their occupational choices have an important affect on the agricultural sector of the economy. If the majority of the urban "aggies" leave agriculture after graduation, the influence of colleges of agriculture on the agricultural sector could be deflated. Even though urban students in agriculture are more likely than their rural counterparts to desire and expect nonagricultural employment, a majority desire and expect to obtain agricultural occupations.

In conclusion, the substantial growth of colleges of agriculture in recent years emphasizes the important role they will continue to play in higher education. The large number of students within these schools will certainly have an influence on our perception of agriculture. The image of farming and agriculture as a whole will continue to change as more and more college educated city-dwellers enter these occupations.

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[4] Although we are aware of more appropriate statistical methods for fitting models under binary conditions of the dependent variable (e.g., logit, probit, weighted and iteractively reweighted least squares, etc.), in order to remain with the usual interpretation of the "probability" of entering either a traditional or a nontraditional major we used OLS estimates. We did not do a weighted least squares solution since our mean responses ranged between .2 and .8 (Neter and Wasserman, 1974:328). The usual bias for such OLS estimates is an overestimated set of standard errors for model coefficients (Hanushek and Jackson, 1977:180-182).

Table 1. Colleges of Agriculture in the South and Weighted Distribution

School	Weighted Sample Size	School	Weighted Sample Size
Alabama A&M	16	Mississippi State	160
Alcorn	27	North Carolina A&T	16
U. Arkansas Pine Bluff	11	North Carolina State	305
U. Arkansas Fayetteville	93	Oklahoma State	236
Auburn	184	Prairie View State	10
Clemson	111	Southern	17
U. Florida	113	U. Tennessee	174
Florida A&M	13	Tennessee State	20
Fort Valley State	8	Texas A&M	516
U. Georgia	181	Texas Tech	182
U. Kentucky	168	Tuskegee Institute	36
Langston	1	Virginia Polytechnic	332
Louisiana State	132	Virginia State	11
		Total	3073*

* When table totals deviate from 3075 it is due to rounding error caused by weighting.

Table 2. Majors in Colleges of Agriculture Grouped into Sixteen Categories

1. General Agriculture

    General Agriculture

2. Agricultural Economics

    Agricultural economics
    Ag. and farm management
    Environmental and resource economics
    Community and rural development
    Rural Sociology
    Agribusiness

3. Agronomy

    Agronomy (soil and plant science)
    Crop production and soil management
    Crop Science (or plant science)
    Soil Science
    Agronomy (other)

4. Animal Science

    Animal science (animal nutrition)
    Animal science (science)
    Animal science (production)

Table 2. (Continued)

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5. Dairy Science
    - Dairy science
    - Dairy manufacturing
    - Dairy production (science)
    - Dairy production (management)
    - Dairy manufacturing
    - Dairy manufacturing (science)
    - Environmental health

6. Entomology
    - Entomology (science)
    - Pest management
    - Plant and animal protection
    - Animal protection
    - Plant protection
    - Entomology

*7. Forestry and Wildlife
    - Forestry
    - Forestry (science)
    - Forestry (management)
    - Wildlife and fisheries science
    - Wildlife (science management)
    - Fisheries (science management)
    - Forestry and wildlife management
    - Natural resources

8. Horticulture
    - Horticulture
    - Horticulture (science)
    - Horticulture (production)
    - Ornamental horticulture
    - Retail forestry

*9. Preveterinary Medicine
    - Veterinary science (preveterinary)
    - Animal science (preveterinary)

*10. Landscape Architecture
    - Park and recreation administration
    - Landscape contracting
    - Landscape architecture/design
    - Turfgrass management

*11. Biological Science
    - Biology
    - Botany
    - Zoology
    - Biochemistry
    - Plant pathology
    - Applied ecology (Bioenvironmental science)

12. Agricultural Education
    - Agricultural education
    - Agricultural and extension education
    - Agricultural journalism

13. Agricultural Engineering
    - Agricultural mechanization
    - Agricultural engineering
    - Agricultural mechanization and business

*14. Food Science
    - Food science

15. Poultry Science
    - Poultry science

16. Range Science
    - Range science

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*Indicates "nontraditional" agriculture major.

TABLE 3. STUDENT'S PLACE OF RESIDENCE BY PARENTS' CHILDHOOD RESIDENCE

Student's Residence	Parents' Childhood Residence											
	Father						Mother					
	Rural Farm		Rural Nonfarm		Urban		Rural Farm		Rural Nonfarm		Urban	
	N	%	N	%	N	%	N	%	N	%	N	%
Rural Farm	495	46.0	96	10.5	40	30.7	366	42.4	159	15.3	105	9.0
Rural Nonfarm	257	23.9	317	34.6	137	12.6	210	24.3	345	33.2	155	13.1
Urban	325	30.1	503	54.9	906	83.7	288	33.3	535	51.5	910	77.9
Total	1077	100.0	916	100.0	1083	100.0	864	100.0	1039	100.0	1168	100.0

TABLE 4. STUDENT'S AGRICULTURAL EDUCATION EXPERIENCE BY PLACE OF RESIDENCE

Took Agricultural Course(s) in High School	Place of Residence					
	Rural Farm		Rural nonfarm		Urban	
	N	%	N	%	N	%
Yes	342	54.3	257	36.4	171	9.8
No	288	45.7	450	63.6	1567	90.2
Total	630	100.0	707	100.0	1738	100.0

TABLE 5. STUDENT'S LEVELS OF EDUCATIONAL ASPIRATIONS BY PLACE OF RESIDENCE

Educational Aspiration	Place of Residence					
	Rural farm		Rural nonfarm		Urban	
	N	%	N	%	N	%
Quit before Bachelor's Degree	28	4.5	16	2.2	28	1.6
Bachelor's Degree	273	43.3	245	34.5	480	27.7
Master's Degree	143	22.7	183	25.7	526	30.4
Professional or Ph.D. Degree	186	29.5	267	37.6	699	40.3
Total	630	100.0	711	100.00	1733	100.0

TABLE 6. STUDENT'S LEVEL OF EDUCATIONAL EXPECTATION BY PLACE OF RESIDENCE

Educational Expectation	Place of Residence					
	Rural farm		Rural nonfarm		Urban	
	N	%	N	%	N	%
Quit before Bachelor's Degree	25	4.0	27	3.8	31	1.8
Bachelor's Degree	408	64.7	399	56.2	967	55.8
Master's Degree	107	17.0	160	22.5	400	23.1
Professional or Ph.D. Degree	90	14.3	124	17.5	335	19.3
Total	630	100.0	710	100.0	1733	100.0

TABLE 7. STUDENT'S AGRICULTURE WORK EXPERIENCE BY PLACE OF RESIDENCE

Agriculture work experience?	Place of Residence					
	Rural farm		Rural nonfarm		Urban	
	N	%	N	%	N	%
Yes	627	99.4	623	87.8	1148	66.2
No	4	0.6	87	12.2	586	33.8
Total	631	100.0	710	100.0	1734	100.00

TABLE 8, STUDENT'S MAJOR FIELD OF STUDY BY RESIDENCE

Type of Major	Place of Residence					
	Rural farm		Rural nonfarm		Urban	
	N	%	N	%	N	%
Traditional	514	81.5	448	63.1	944	54.4
Nontraditional	117	18.5	262	36.9	790	45.6
Total	630	100.0	710	100.0	1734	100.0

TABLE 9. OCCUPATIONAL ASPIRATIONS OF AGRICULTURE STUDENTS BY RESIDENCE

Occupational Aspiration	Place of Residence					
	Rural farm		Rural nonfarm		Urban	
	N	%	N	%	N	%
Agriculture Occupation	552	87.7	570	80.7	1340	77.1
Nonagriculture Occupation	78	12.3	137	19.3	398	22.9
Total	630	100.0	707	100.0	1738	100.0

TABLE 10. OCCUPATIONAL EXPECTATIONS OF AGRICULTURE STUDENTS BY RESIDENCE

Occupational Expectations	Place of Residence					
	Rural farm		Rural nonfarm		Urban	
	N	%	N	%	N	%
Agriculture Occupation	552	87.5	585	82.9	1367	78.6
Nonagriculture Occupation	79	12.5	121	17.1	371	21.4
Total	631	100.0	707	100.0	1738	100.0

TABLE 11. STUDENTS' RESIDENTIAL ASPIRATIONS BY PLACE OF RESIDENCE

Residential Aspiration	Place of Residence					
	Rural farm		Rural nonfarm		Urban	
	N	%	N	%	N	%
Rural farm	453	71.8	251	35.4	498	28.7
Rural nonfarm	117	18.5	299	42.1	490	28.2
Urban	61	9.7	160	22.5	747	40.1
Total	631	100.0	710	100.0	1735	100.0

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Student Achievement Test Scores in Alabama: Non-metro and Metro School Systems*

Mary A. Soderberg and John E. Dunkelberger
Department of Agricultural Economics and Rural Sociology
Auburn University

In the last fifteen years, there has been much interest in improving the educational opportunities of racial minorities and the poor. From this has evolved a series of federally sponsored intervention programs such as Head Start, school breakfasts, and expanded vocational education. But only recently has interest again focused on the special problems of non-metro school systems and their role in the problams associated with poverty and ruralness. Traditionally, educational standards and policies have been determined primarily by and for metropolitan schools (Sher 1978:2) even though a large proportion of the school age population attends schools located in non-metropolitan areas. According to Jonathan Sher (1978) rural schools have unique problems associated with their sparsity and isolation, such as relatively high overhead and a smaller tax base. The result is a lower quality of educational opportunity provided for rural youth.

One manifestation of this difference is seen in the fact that non-metro school children score significantly lower than the U.S. average in almost every subject area on standardized tests (Coleman; 1966). Ultimately, the cost of this lower level of educational achievement is born both by the young and by their communities. Many rural students are deprived of a quality education, one that will develope their abilities and and talents, while their communities are handicapped by not having the best trained citizenry for productive employment and leadership statuses. The Presidents National Advisory Commission on Rural Poverty (1967:41) noted this state of affairs by stating that:

> "rural adults and youth are a product of an educational system that has historically short changed rural people. The extent to which rural people have been denied equality of educational opportunity is evident from both the products of the educational system and the resources that go into that system. On both counts the quality of rural education ranks low."

Problem Statement

Documentation of non-metro and metro differences in educational quality as it effects young people is often difficult to determine. Standardized measures of attainment are seldom available in a form compatable with indicators of educational quality. However, a recent administration of the California Achievement Test throughout Alabama provides a unique opportunity to focus on student achievement using school systems as units of analysis.

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Rural education is almost universally assumed to be in lesser quality than urban education. This analysis will attempt to show the extent to which rural-urban differences exist in achievement scores between metro and non-metro school systems in Alabama. Further analysis will identify a number of quality indicators for school systems serving rural and urban youth in order to determine the kinds of system level factors associated most significantly with differences in achievement scores. The reason for focusing on school systems is that this is the lowest level at which there is centralized administrative control over both educational program and administration of resources (Bidwell and Kasarda, 1975).

Literature Review

The predominant trend in attainment studies for the last ten years has been of a social-psychological nature emphasizing the attainment of occupational status. Considerable concern has been given to the impact of peer group, family, race, and socio-economic status upon achievement among youth and young adults.

The Wisconsin model of educational and occupational status attainment developed by Sewell and Houser (1972, 1975) includes academic performance, interpersonal influences of significant others, academic ability, and educational and occupational aspirations as variables intervening between socio-economic origins and educational and occupational attainments. Structural characteristics of schools have seldom been incorporated into such analyses and, when considered, have shown little influence on individual attainments. The part generally assigned to structural factors is merely as a functional means for transmission of parental socio-economic status to their children, especially among white, males (Houser 72, Sewell and Houser, 75). The model considers as "school process variables" (DeBord et. al, 1977) academic ability, academic performance, three types of significant others influences and educational plans. Each of these variables is seen to intervene between parental socio-economic status and occupational attainment.

The Coleman Report in 1966 early emphasized the importance of socio-economic factors on academic achievement and attainment. However, the Report made several exceptions when discussing the South and, particulary, disadvantaged minority students. The average white student was reported as being less effected by any strength or weakness of a school's facilities than was a minority student. In the South 20 percent of the variation in achievement scores for blacks was found to be associated with the schools they attended, whereas among whites only 5 to 10 percent of the variation was attributed to differences between schools (Coleman 1966, Tweeton 1975).

Coleman concluded that improvements in school quality will have an impact on disadvantaged and minority students but little effect on white students.

There is a continuing socio-economic differential between non-metro and metro areas (Tweeton 1979). The uneven distribution of wealth further aggravates this differential because non-metro school systems lack the resources necessary to provide the quality of schooling needed for students to meet their full learning and employment potentials. However, comparable systematic information is rarely available for assessing attainment differentials, plus there is a lack of agreement about what measures serve as adequate indicators of the school's performance of its educational function.[1] Two indicators of student achievement- school grades and standardized test results- are possibilities but both possess limitations. Either they are not widely used or they lack standardization. Thus, although differences in academic achievement between schools is assumed, it is difficult to determine the contributing factors involved. The family and social environments of the students as well as the school environment appear interrelated in effecting student achievement (Brookover 1975).

One of the few research efforts to use standardized achievement test scores to measure student academic attainment was conducted by Bidwell and Kasarda (1975) for school districts in Colorado. The measures of student attainment or achievement were determined using either of three standardized tests[2] and normed "by the national distribution of performance by grade on the particular test" (p. 60). Both the reading and mathematics scores on these tests were analyzed relative to five measures of the social environment of the students and four attributes of school district organization. The former conditions included school district size, fiscal resources, percent of disadvantaged students, parent's education and percent nonwhite; while the latter were pupil-teacher ratio, administrative intensity ratio (administrators per classroom teachers), professional support ratio and staff qualification (percent with masters degrees).

A causal model was employed which placed the school district organizational attributes as intervening between the anticedent social environment and achievement test scores. The major findings relative to school system attributes was that median levels of students attainment were depressed by pupil-teacher and administrative intensity ratios and fostered by staff qualifications.

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[1] Typical of this dilemma is the Colorado battle over the minority rights of Mexican-American children for a quality education. The rural-urban distribution of minority students is a critical factor. *Un Nuero Dia* 6:1 (Winter, 1980) Published by the Chicano Education Project, Denver.

[2] The standardized tests used included the Stanford Achievement Test, the Iowa Test of Education Development or the Test of Academic Progress.

Among the characteristics of the social environment considered, only the percent nonwhite[3] had a direct effect on attainment, although all environmental characteristics displayed an indirect effect through the organizational structure.

Design of Analysis

Following the general approach employed by Bidwell and Kasarda (1975), the present study will concentrate on the school system as the unit of analysis with the non-metro and metro nature of the school system and its service area as the sole environmental condition. In effect, this design controls for the socio-economic differences between rural and urban areas and the school system that serve them. Using student achievement test scores as a measure of system's efficiency in serving its student population, selected indicators of system characteristics will be studied, for the two types of school systems.

As a general focus, attention is given first to the hypothesis that non-metro school systems have lower student achievement scores than do metro school systems. Because a sizeable proportion of rural students are economically disadvantaged there is reason to believe that structural characteristics of school systems play an important part in shaping student achievement scores and eventual occupational attainment. As a result the following specific hypotheses are put forth: 1) the higher the average dollar expenditure per student the higher are student achievement scores; 2) the higher the teacher-student ratio the higher are student achievement scores; 3) the higher the average daily attendence the higher are achievement scores; 4) the higher the average high school teachers' salary the higher are achievement scores; 5) the larger the student enrollment the higher are student achievement scores; and 6) county school systems have lower student achievement scores than city systems within both metro and non-metro areas.

The purpose of this research is to investigate these seven hypotheses to determine the extent to which they are applicable to non-metro and metro school systems in Alabama. Education in Alabama is marked by a sizable proportion of non-metro school systems and a sizeable non-white population throughout the state.

Procedures

The California Test of Achievement, 1977 edition, was administered by the State Department of Education in February, 1979 to public school students throughout Alabama. A summary report providing test scores means by grade for each school system was prepared and released to the public. Scores were reported for reading, spelling, math and the combined battery, of which only the battery scores are considered here.

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[3] This use of percent nonwhite was criticized by Hannan, et al (1976) because it masks the Mexican-American minority which is defined as white in the dichotomized white-nonwhite variable used.

Also, published annually by the Alabama Department of Education are a wide variety of statistics for every school system. The most recent report available was for 1977 (Annual Report: 1977 Statistical and Financial Data).

This analysis will be limited to the Achievement test scores for only two grades, eight and twelve. Grade eight was selected because it is often viewed as a critical threshold in adolescence and the point of transition from elementary to high school. Similarly, grade twelve is the culmination point at which the product of the educational system can be assessed.

Due to the nature of the available data this analysis considers only the mean achievement scores for students attending each of the 127 school systems in Alabama. These systems have been grouped as non-metro or metro on the basis of State Standard Metropolitan Statistical Areas. Forty-five school systems are located in SMSA's and 82 in non-metro areas.

Variable used to represent the structural characteristics of each system are: 1) expenditures per student, 2) student-teacher ratio, 3) rate of average daily attendance, 4) average high school teachers' salary, 5) total enrollment of each system, and 6) type of school system (whether it is county or city administered). This latter variable was dummy coded as '1' for city systems and '0' for county systems.

The t-test is used to determine the extent of variation in mean achievement test scores between metro and non-metro school systems. Correlation coefficients are employed to determine the relationship between test mean scores and selected structural characteristics reflecting the quality of education provided by the school system. Finally, multiple regression analysis is used to determine the effects of this set of independent variables on the dependent variable of student achievement scores across two broad groups of school systems, metro and non-metro.

Findings

As a prelude to this analysis attention was first focused on the hypothesis that students attending non-metro schools display lower mean achievement scores than those attending metro schools. For this relationship we considered test results for all grades. Our purpose was to assure that any rural-urban differences occurring for eithth and twelfth grade student were not unique to these grades. True non-metro and metro differences should theoretically permeate all grades.

Table 1 shows the composite or achievement battery scores for each of the twelve grades by non-metro and metro school systems. Beginning with first grade, students attending metro school systems have higher scores. This gap tends to increase throughout the school process. Moreover, standard deviations among the scores is greater for metro than for non-metro students through the ninth grade. Beginning with the tenth grade this reverses with greater variability among non-metro

Table 1. Achievement Battery Test Score Means for Metro and Non-Metro school systems in Alabama.

	Non-Metro		Metro		Variance	
	mean	st. dev.	mean	st. dev	t Value	p
GRADE ONE	1.75	.166	1.85	.264	-2.55	.013
GRADE TWO	2.76	.373	2.95	.385	-2.70	.008
GRADE THREE	3.71	.391	3.93	.512	-2.50	.015
GRADE FOUR	4.64	.562	5.04	.675	-3.43	.001
GRADE FIVE	5.57	.654	6.00	.749	-3.22	.002
GRADE SIX	6.43	.727	6.95	.818	-3.57	.001
GRADE SEVEN	7.15	.826	7.74	.996	-3.34	.001
GRADE EIGHT	8.35	.979	8.99	1.217	-3.05	.003
GRADE NINE	9.11	1.155	9.90	1.333	-3.33	.001
GRADE TEN	9.80	1.357	10.61	1.240	-3.39	.001
GRADE ELEVEN	10.60	1.545	11.31	1.279	-2.77	.007
GRADE TWELVE	10.98	1.554	11.83	1.279	-3.29	.001
	N=82		N=45			

school systems. Results of the t-test indicated that the differences in cumulative mean scores for metro and non-metro schools were significant at the .01 level for all grades above the third grade.

Table 2 shows the zero-order correlation matrix, means and standard deviations of grades eight and twelve for metro and non-metro systems on selected school system characteristics. The means and standard deviations are lower for the non-metro systems than for the metro systems except for the means of student-teacher ratio and average daily attendance which are slightly higher in the non-metro systems. Size of school system defined as total student enrollment was the only variable that failed consistently to correlate with achievement scores. All other variables correlated significantly with achievement scores except in the case of grade twelve students attending metro school systems. Here only whether the school system was county or city administered was correlated with student achievement scores.

City systems produced students with higher achievement scores than did county systems in all situations tested including that for grades twelve students in metro areas. Expenditures per student and average high school teachers' salary were positively correlated with achievement scores within both metro and non-metro systems, except for the metro twelfth grade. Average daily attendance was negative for non-metro but positive for metro systems. This was also a more sensitive factor for non-metro schools.

Regression analysis was used to determine the extent to which these six school system variables contributed to differences in student achievement test scores. Table 3 shows the unstandardized regression coefficients of the achievement battery test score means for grades eight and twelve of metro and non-metro school systems. The results reveals that system level differences do exist between metro and non-metro systems.

Non-metro. In the case of the non-metro or rural school systems, two characteristics accounted for most of the explained variation in achievement scores. Both the dummy variable, type of school system (either county or city administered) and average high school teachers' salary were highly significant. The positive direction observed indicated that students attending small city systems in rural counties had higher test scores as did students attending schools in which high school teachers received relatively better salaries.

The variable indicating average daily attendance for the school system had a negative impact on achievement scores. The lower the average attendance the higher the achievement scores. Also these data indicate that this characteristic is more important for rural twelfth graders than for eighth graders.

None of the other variables considered for non-metro systems were found to contribute significantly to differences in achievement. Expenditure per student, student-teacher ration and system enrollment each revealed low impacts. Overall the six system level characteristics considered explained about half of the variance in average achievement

Table 2. Correlation Matrix, Means and Standard Deviations

NON-METRO Variable		X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	METRO Variable
Grade 8 Battery $\bar{x}$=8.4 s=.967	X_1	1.00	.73***	.37**	.25*	-.44***	-.17	.34**	.42**	X_1 $\bar{x}$=9. s=1.217
Grade 12 Battery $\bar{x}$=11. s=1.554	X_2	.89***	1.00	.06	.18	-.09	-.19	.34**	.19	X_2 $\bar{x}$=11.8 s=1.279
Expenditure per Student $\bar{x}$=683.79 s=65.55	X_3	.30**	.24**	1.00	-.15	-.65***	-.005	.42**	.23**	X_3 $\bar{x}$=730.76 s=115.47
Average Daily Attendance $\bar{x}$=.92 s=.025	X_4	-.28**	-.37***	-.0002	1.00	-.10	-.19	.005	.02	X_4 $\bar{x}$=.91 s=.041
Student/Teacher $\bar{x}$=22.71 s=1.32	X_5	-.36***	-.30**	-.66***	.03	1.00	.13	-.41**	-.38**	X_5 $\bar{x}$=22.35 s=2.82
Enrollment $\bar{x}$=3821. s=2103.07	X_6	-.05	-.07	-.04	-.04	.14	1.00	-.34**	.12	X_6 $\bar{x}$=10371 s=14657.18
Type of System $\bar{x}$=.40 s=.493	X_7	.62***	.64***	.16	-.31**	-.28**	-.33	1.00	.39**	X_7 $\bar{x}$=.60 s=.495
Average H.S. Teachers' Salary $\bar{x}$=10239 s=311.63	X_8	.55***	.59***	.32***	-.16**	-.30**	-.01	.51***	1.00	X_8 $\bar{x}$=10590 s=469.91

*P<.05 **P<.01 ***P<.001

Table 3: Unstandardized Regression Coefficients of Achievement Battery Scores for Grades Eight and Twelve on Selected Structural Characteristics of Alabama School Systems

	Eight Grade Battery		Twelfth Grade Battery	
	Non-Metro	Metro	Non-Metro	Metro
Expenditure per Student	.001	—	.0003	-.002
Student-teacher ratio	-.077	-.112	-.109	.01
Average Daily Attendance	-1.846	5.807	-10.698*	4.286
Average H.S. Teachers' Salary	.001**	.001*	.001*	.001
System Enrollment	.0001*	-.00001	.0001*	-.00001
Type of System	.89**	.21	1.355**	.805
R^2	.49	.33	.54	.17
F-Value	11.8	3.86	14.32	1.32
	N=82	N=45	N=80[1/]	N=45

* Coefficient twice its standard error.

** Coefficient three times its standard error.

[1/] Two school systems did to administer the California Achievement Test at the twelfth grade level.

test results for non-metro eighth and twelfth graders. The explained variance was 49 and 54 percent for the respective grades, significant at the .001 level.

Metro. Results of the regression analysis for metro school systems differed in several respects from those for non-metro systems. One important fact was that the profiles of the eighth and the twelfth grades differed considerably.

Both student-teacher ratio and average high school teachers' salary contributed significantly to variance in achievement test scores for grade eight. Conversely, neither of these characteristics differentiated at the grade twelve level, while type of system was a significant factor. The variables of expenditure per student, average daily attendance and size of system enrollment failed to account for much variance in achievement scores of metro students attending either the eighth or twelfth grades.

This set of six school system characteristics explained 33 percent of the variance in mean achievement test scores of metro eighth grade students, significant at the .05 level. However, these same characteristics accounted for only 17 percent of the variance in twelfth grade scores and was not statistically significant.

Conclusions

The major objective of this study was to examine the rural-urban contextual differences in achievement scores with relation to structural characteristics of Alabama school systems. We found support for the hypothesis that school systems characteristics are associated with student achievement scores. Moreover, the results suggest that systemwide characteristics do affect non-metro students more than metro students.

Only the system level characteristics of type school system and average high school teachers' salary had prominence for both metro and non-metro systems. City operated school systems were associated with higher average achievement scores than were county systems. Similarly a positive relationship prevailed between the average salary levels of high school teachers and student achievement scores. Both of these hypotheses were supported. Together these two characteristics form a linkage between the greater affluence of urban areas and their local tax base and the financial resources of the school system. It appears on the surface, that money does provide a better quality educational experience and a better student outcome.

A note of caution needs to be interjected concerning these findings. Do financial resources alone account for these differences? We think not. The consistant absence of an direct relationship between per student expenditure is one reason for this. More attention needs to be given to the measures of financial resources of school systems. In addition, consideration must be given to the obvious demographic differences associated with metro and non-metro areas.

Additional analysis is planned to consider racial composition and socio-economic characteristics of the school systems' service area as exogenous variables. Our anticipation is that consideration of these factors will be insightful in assessing the nature to system level impacts on student achievement.

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SESSION I

NETWORK ANALYSIS: INTERPERSOANL INFLUENCE IN DECISION MAKING (S-120)

THE ROLE OF FORMAL ORGANIZATIONS IN THE DEVELOPMENT OF LOW INCOME NON-METROPOLITAN COUNTIES IN THE SOUTH, Bert Gullett, Donal E. Voth and Michael K. Miller, University of Arkansas.

THE ROLE OF FORMAL ORGANIZATIONS IN THE DEVELOPMENT OF LOW INCOME NON-METROPOLITAN COUNTIES IN THE SOUTH

By

Bert Gullett, Donald E. Voth, and Michael K. Miller
Department of Agricultural Economics and Rural Sociology
University of Arkansas

Abstract

The major objectives of this research were to determine whether organizations can be categorized by type as to roles they play in local development, and to determine what influence any resulting patterns have upon the relative success of local development efforts in formerly designated low income counties. The first objective was achieved by tabulating the frequency with which different types of organizations were identified as being active in development efforts throughout the Southern Region. The second objective was achieved by identifying several possible patterns of organizational involvement, and by correlating these patterns with an independent measure of the relative success of development efforts. The patterns identified involve the following: (1) The proportion of selections within each county going to the most frequently selected organizations served as a measure of relative legitimacy or the extent to which certain organizations were referred to as Community Decision Organizations, and (2) Organizations were classified into three major categories; business and industry, voluntary, and governmental. The proportion of selections falling into each category was separately correlated with the independent measure of success to determine which organizational categories were most likely to lead to successful development. Findings of this project indicated that several types of organizations were frequently mentioned as being influential in development issues. Among those types were Civic Clubs, Chambers of Commerce, and County Governments; these types were, among others, accorded the status of Community Decision Organizations. Findings relating types of organizational involvement with levels of success were generally negative. Several limitations in the study design may have contributed to the apparent lack of significant relationships between type of organizational involvement and success.

SESSION J

POVERTY

POVERTY, FEMALE-HEADED HOUSEHOLDS, AND SOCIAL POLICY: SOME OBSERVATIONS AND REFLECTIONS, Satish Sharma and Helen Ormsby, University of Iowa.

EFFECTS OF A HUMAN RESOURCES DEVELOPMENT PROGRAM ON THE ECONOMIC STATUS OF PUBLIC ASSISTANCE RECIPIENTS IN RURAL AREAS, W. R. Summerhill and C. L. Taylor, University of Florida.

POVERTY, FEMALE-HEADED HOUSEHOLDS AND SOCIAL POLICY: SOME OBSERVATIONS AND REFLECTIONS*

by

SATISH SHARMA
and
HELEN ORMSBY

School of Social Work
University of Iowa
Iowa City, Iowa

Poverty is by no means a new condition, and by some criteria or other some people have always been poor. However, what has changed over the years are the conceptions of poverty with regard to its origins, nature, accompanying circumstances, and the consequent measures which could be adopted to ameliorate the problem.[1] An additional major change which has occurred over the years is in the area of awareness and publicity of the problem and an increasing conviction on the part of many that poverty in any form (physical, technological, economic, social, or cultural) is an unjust and undesirable condition and that something must be done about it. Such a conviction is noticeable at many different levels within the societies and among different sections of the population. However, the conviction is much more clearly noticeable now at the international level, in both the developed and developing societies.[2] This increased concern about the problem has led to a greater international cooperation in the development of appropriate technologies, resources, policies and programs in an effort to eradicate the problem.

Although the basic conditions and impacts of poverty have been about the same in all societies, the actual manifestations of the problem have differed from society to society in terms of the historical, economic, social and cultural factors of poverty, the kinds of people affected by it, and the conceptions of an appropriate response to the poverty situation. In view of these differences, a considerable variety of social policies and related adopted measures have emerged cross-culturally aiming to deal with the problem. These policies and measures tend to comply with different social and political philosophies, have different value bases and tend to aim at different goals.[3]

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THE OBJECTIVE

Poverty is a complex and pervasive circumstance which seems to affect societies all over the world at many different levels in a multitude of ways. The focus of the present paper, however, is relatively more specific and we are primarily looking at the economic dimensions of poverty which affect female-headed households in the United States. Wherever possible, an attempt has also been made to point out the cross-cultural counterparts of the phenomenon. However, these cross-cultural comparisons are more in the vein of sidenotes, rather than an obiligatory part of the analysis. The paper begins with an introduction to historical conceptions of poverty and female-headed households, examines their relationship, related social and political policies and their future trends.

THE HISTORICAL CONCEPTIONS OF POVERTY

Poverty has covered most societies like a large blanket for a major portion of human history. This led to a common belief that poverty was a normal circumstance which a majority of the people simply had to withstand. Poverty in this was generally attributed to fate, the will of God, foul play of evil spirits, or the results of one's own actions in the present or past birth. Recommended solutions were: keeping the virtures of perseverance, patience, honesty, and dutifulness and trying to appease the spirits and God with offerings, sacrifice, prayer, personal torture, or whatever else one could think of. Depending on its connotation, however, the condition of poverty was not always undesirable. Where the emphasis of life was non-material, poverty was considered a desirable condition and many people would give up their material possessions (and thus deliberately create a condition of poverty) in order to purify their souls and to be closer to God. But, even under such circumstances, poverty as a desirable condition never won popular support from the general public as is evidenced by the presence of social welfare and mutal aid programs even in the primitive societies. At the same time, however, poverty did not seem to carry[4] any social stigma and a poor person was as much respected as any other.

For a long time, the above conception of poverty continued to prevail in most societies until about the twelfth century. But, from thereon the conception of poverty started to change, particularly on the European continent. From about the middle of the fourteenth century, the conception of poverty changed in a rapid way, first gradually gathering a social stigma and later becoming a sort of personal crime formally linked to the problem of vagrancy. Late in the seventeenth century, attitudes toward poverty hardened even more with the emphasis of the Protestant and Calvinist virtues of industry, sobriety and thrift. Wealth came to be regarded as a mark of virtue and poverty was a mark of sin. This led to the passing of many repressive laws against the poor and laws today continue to retain this essential nature.[5]

THE UNITED STATES

The United States has witnessed similar changes in the conception of poverty. In the early stages of the country, most immigrants were poor, the living conditions in America were hard and most Americans expected to be poor most of their lives. Poverty, at this stage, was considered as a normal circumstance and being poor was a matter of no shame. Later in the ninteenth century, however, with an unprecedented increase in output from farms, factories and mines, the notion of inevitable poverty began to be challenged slowly and many social leaders started arguing that poverty in America was inexcusable. Poverty, at this stage, was defined as the lack of minimum resources for subsistence and the progressive movements of the time tried to generate such resources which would meet the minimal needs of food, shelter, clothing and basic medical care of the population.[6]

Gradually, the response to the needs of the poor changed from a system of personal philanthropy to the development of some charitable and social welfare institutions. Poverty, though still a personal circumstance, came to be recognized as an undesirable condition and it became a popular theme of visual art, theater, films and literature. Soon, increased responsibility for the care of the poor came to be lodged in the government, first at the local levels and then at the state and federal levels. From about the middle of the ninteenth century, many laws were passed to prohibit child labor, to regulate women's working hours and wages, to protect unions, to institute worker's compensation, to support the unemployed and the unemployable, to provide food supplementation, to create public work projects and to improve conditions in large cities. All this showed a considerable concern on the part of the government for the prevailing conditions of poverty within the country.[7]

The most important changes in the conception of poverty in the United States occurred between the 1930s and the 1960s. During the Great Depression of the 1930s, millions of formally financially comfortable people were plunged into the painful condition of poverty and it was at this point that poverty for the first time came to be defined as a social rather than a personal problem. With the end of the Depression, however, the economy of the country recovered, employment became almost full and poverty no longer received any big public recognition. In fact, it was the American prosperity of the 1940s and the 1950s which had led to more harsh attitudes toward the poor and blaming the poor for their own problems became a popular and recurrent theme. In this period, stereotyping of the poor also became popular and they were often protrayed as lazy, shiftless, unwilling to work, sexually indulgent, immoral and anxious to live on the public dole. It was not until the 1960s that the social scientists and policy makers started questioning these attitudes and stereotyping and it was then that they realized how far off the mark they were in understanding the poor.[8]

With this new realization, the conception of poverty also underwent some further changes. While earlier, poverty was considered as a temporary condition of a fresh immigrant, or ot a young worker,[9] it was no longer considered so now. Rather, now it came to be recognized as a relatively permanent condition which seemed to have become "the birthright of a large and growing segment of the population."[10] This changed conception created a further concern about the condition of poverty both in the public and the private spheres and ultimately led to the declaration of a war on poverty in the 1960s.

THE NOTION OF AFFLUENCE

Even with the prevalence of poverty in the United States, the notion of America being the most affluent country in the world is strong both at home and abroad. Partly, this notion is due to the subjective feelings of the people, but partly the image of affluence is also warranted by some of the economic indicators of affluence in the country. In 1973, for example, the American per capita income of $6640 ranked third in the world. The American median annual income of $12,840 and a gross national product of $900 billion were the highest in the world.[11] Given these economic indicators, it appears strange that there should be poverty in such a country. Unfortunately, however, the macro level economic indicators alone do not reveal a total picture of the society's affluence. Rather, in this case those tend to confound the situation and make it difficult to understand why 1/8 to 1/5 of the American population still lives in poverty, depending upon which definition of poverty is being used.[12] The macro level economic indicators also do not reveal an appropriate picture of relative poverty in the society which has shown considerable resistance to change overtime. Lately, however, it is becoming clear that relative income distribution of the American people has not changed significantly since the depression times when President Roosevelt had remarked that "1/3 of our nation is ill-housed, ill-clad and ill-nourished."[13]

The above mentioned conditions and conceptions of poverty have shown an intimate relationship with the life situations of all kinds of people in the United States. However, in the case of female-headed households the relationship has been a unique one due to some special social and economic characteristics of female-headed households. The following section is a general introduction to female-headed households. Their economic and social problems and related social and political policies will be dealt with in other sections.

FEMALE-HEADED HOUSEHOLDS

Female-headed households are currently a real and growing phenomenon where a woman typically looks after herself and often also raises the children without any help from a male partner. In the United States, 14 per cent of all families are currently headed by females. The percentage is even higher in some other countries around the world. In Indonesia, 16 per cent of all the families are headed by females as compared with 33 per cent of such families in the countries of the Commonwealth Caribbean and almost 40 per cent of them in Kenya and other African countries south of the

Sahara. Not only do female-headed households from a substantial part of the total number of families in most societies, but the trend is also toward their increased recognition, both in the developed and the developing societies.[14]

Objectively speaking, therefore, female-headed households should no longer be considered as a unique or a deviant phenomenon which would be unworthy of coverage within the "normal" context of the family. Female-headed households are very real and their origins, structure and needs all have a rational explanation like that of any other varient form of the family. The truth of the matter, however, is that traditional conceptions of female-headed households are about as strong today as ever and both in terms of social attitudes and the adopted governmental policies, female-headed households continue to be regarded as an aberration, the product of disaster, or at least the result of a terrible mistake.[15] In the Western industrial nations, the mental conception of a normal household continues to be that of a nuclear family where a husband earns the income and the wife dutifully runs the household and takes care of the children. A similar mental picture of non-Western nations is that of an extended family, where several generations live together peacefully under the same roof, eat from the same kitchen and manage their affairs jointly under the strict supervision of an old patriarch or matriarch.[16] Numerous changes have occurred in the institution of the family and many diverse forms of the family have evolved cross-culturally over the years. However, the tendency on the part of the people has been to ignore these empirical realities in an effort to hold on to their cherished mental images of an ideal family. This has often resulted in a social and political non-recognition of female-headed households as being equal with other family units and thus the former have been victims of the rigid attitudes within societies. This has happened not only to female-headed households, but also to all other family units which did not conveniently fall within the conventional conception of a "normal" family.

THE ORIGINS

Given the above social and personal circumstance of female-headed households, an understanding of their origins and characteristics appears to be important for dealing with their economic and political problems. Typically, a female-headed household comes into existence through one or more of the following reasons: 1) the death of a husband, 2) divorce, seperation, or abandonment, 3) childbearing outside a marital union, and 4) disproportionate migration of men and women.[17] In the case of Western nations, divorce, abandonment, childbearing outside the marital union and death of the husband are some of the most common causes for the occurrence of female-headed households. In other countries, like Turkey, Algeria, Morocco and southern Italy, it is the emigration of the males to the industrial centers of Europe which has been largely responsible for the occurrence of female-headed households. In sub-Saharan Africa, similarly, men have migrated to the construction sites and mines of South Africa and Zambia in large numbers rendering one in every four households being headed by a female. In the case of Latin America, migration to the cities has occurred more in the case of women and this has been responsible for numerous female-headed households there. Some women take their children with them while migrating. Others tend to establish their households later after settling down in the new place. In the case of Latin America and the Caribbean Commonwealth, the rate of illegitimacy has also contributed very significantly to the occurrence of female-headed households.[18]

Lastly, a longer life expectancy for females in many societies, the social and cultural norms of marriage between an older man and a younger woman, the prevalent biases against the remarriage of divorcees and widows and narrower marriage market for poor and old women and women with children have contributed significantly to the occurrence of female-headed households.[19] In countries, like India, remarriage of divorcees and widows is virtually prohibited in social terms. However, even where the societal norms to remarriage are more liberal, the poor, the less attractive, the divorced, the widowed and the women with children find it often very hard to locate a suitable spouse for marriage. Most of them, therefore, continue to be within the ranks of female-headed households for a long time.[20]

THE CHARACTERISTICS

The origin of a female-headed household in many cases is a relatively sudden phenomenon and most new female-heads are generally not prepared to shoulder this responsibility either due to the lack of mental readiness, or due to the lack of needed resources, or both. Research shows that female-heads are generally poorly educated, lack the needed occupational training and skills, have very limited access to adequately paying jobs, have scant legal protection and have virtually little recognition as a significant segment of the society.[21] The female-heads are discriminated against in hiring, in job conditions, in salaries and in terms of their social and political treatment. They are also often victims of many other biases that are prevalent in societies. In most societies, therefore, female-headed households enjoy very little social prestige and they often have to manage with distressingly low economic and social resources. Alimony is rare and the sums are usually small. In the United States, where the situation is relatively more favorable, only 4 per cent of divorced women were collecting alimony in 1975. Among those with minor children, only 40 per cent received child support payments. The plight of unwed mothers was even worse. As compared to 40 per cent of the divorced women who received child support payments in 1975, only 4 per cent of unwed mothers received such payments.[22]

Female-headed households, thus, appear to suffer from considerable economic and social insecurity all over the world and they often face an all-around tough luck. That these families survive and manage to hold on together, is really an accomplishment.

THE POVERTY

In terms of their economic status, female-headed households form a bulk layer in most societies. In the United States, 45 per cent of all the poor families are currently headed by females and their number has been on an increase over the years. Between 1970 and 1973, for example, female-headed households among the white population increased from 21 to 37 per cent. In the same period, a corresponding increase in female-headed households among the black population was from 33 to 69 per cent.[23] Although definite reasons for this dramatic differential are not available, the current differences in divorce and illegitimacy rates and the present economic assistance policies which may encourage the desertion of a father from families on welfare, seem to be at least partially responsible for this. Within female-headed households, of particular concern to policy makers have been the number of children who are constantly being exposed to the condition of poverty. In 1959, 24 per cent of all poor children lived in fatherless homes and in 1970, their number increased to 55 per cent.[24]

The major reason for the poverty of female-headed households has been their inability to participate in the labor market. This has been partly due to the necessity of female-heads to stay at home to look after the children, but partly this has also been due to the lack of appropriate facilities for child care and the very low paying jobs which are available to them in the job market. When these factors are combined with the general economic and social instability of female-headed households, the participation of female-heads in the job market becomes virtually impossible since getting a job with odd conditions and low pay is simply not worth the effort. Over 60 per cent of female-heads, therefore, were out of the job market in 1975 and even those who were employed, only a very small percentage of them had jobs which were regular, full-time and went the year-around.[25]

Considering, therefore, their employment situation and considering that a majority of the female-heads do not generally have other resources, a program of public assistance for them becomes an absolute necessity. Some females require this help until their children are old enough to go to school. Others, who lack appropriate training and skills for employment, or whose disabilities (preclude employment) are forced to live on public assistance as a way of life.[26]

Lastly, in spite of the many prevalent misconceptions, research shows that many female-heads would like to work, rather than stay at home, provided proper child care and job training facilities were available to them. They also do not have illegitimate children simply to draw more public assistance benefits. Research, to the contrary, shows that during the time these families are on public assistance, the incidence of illegitimacy among them is lower than in the case of the general public. Many other misconceptions about female-headed households, similarly, are also ill-conceived and ill-founded.[27]

SOCIAL POLICIES

It should be clear by now that the plight of female-headed households is a real one and that their poverty is not simply due to educational or economic factors alone. Rather, a whole set of complex factors explain their poverty, including past tradition and history, the prevailing social, political and moral attitudes, the conceptions of a "normal" family and the built-in sexual and legal inequities in societies. Any effective social policy relating to female-headed households, therefore, has to account for all these factors and any segmental or half-hearted attempt to deal with their problems is likely to cause more problems than it solves. Further, the approach to the problems of female-headed households and their poverty has to be comprehensive and multidemensional, and mere economic solutions to their problems are simply not going to be enough.

Compared to the above goal, current social policies relating to the needs of female-headed households appear to fall short of the target all over the world. Some countries, like Sweden and Denmark, have made better economic, social and legal provisions relating to the needs of female-headed households. Yet, even there, the treatment of the problem has been segmental and the approach, for the most part, has been curative rather than preventive. In the United States social policies around the needs of female-headed households has been based primarily on the economic domain and relatively little effort has been made to recognize their other needs in the social, legal and political areas. In terms of impact, therefore, the current social policies have created cushions to ease the fall of female-headed households into the domain of poverty.[28] Social policies have done very little to prevent these households from being poor or to help them come out of poverty once they fall into it.

AFDC is the most important program dealing with the needs of female-headed households, although some help to them is also available under OASDHI, Food Stamps, Medicaid, Head Start, School Lunch and School Breakfast programs. AFDC is by far the largest of all the assistance programs in the United States and in 1974, two-thirds of all public assistance recipients were AFDC families.[29] The payments under the program, however, are very low and the total available help to AFDC families from all available programs often falls short of their needs. Many AFDC families, therefore, live in a state of poverty and with the rising inflation rate each year, more and more of the families keep on falling further behind the minimal acceptable standard of living in the United States. In 1962, 3,658,000 families were on AFDC rolls and by 1975, their number had increased to 11,346,994.[30] In order to arrest this rapid growth in the number of AFDC families, the federal government lately has tried several rehabilitative, work training and social service measures, but with very limited success.

Conceptually, a female-headed household is still considered as an aberration, where a depressed and frustrated mother is struggling hard to raise her children. This image is reflected in social policies and accordingly female-headed households predominate in assistance programs. In terms of their other characteristics, whites still dominate among families on welfare, followed closely by blacks. Proportionately, however, blacks and other racial minorities are overrepresented in the welfare rolls which is partly responsible for the negative stereotyping of the minorties. In 1971, 48 per cent of AFDC families were white, 43 per cent of them were black and 8.5 per cent were from other minority groups. Fifty-four per cent of AFDC families had one or two children and in terms of their educational levels, 3/4 of the AFDC mothers had not finished high school.[31] When these factors are combined with the earlier described characteristics of female-heads, only a few of them seem to have any reasonable chance to remain away from poverty, or to come out of it after falling into it. The general sexual inequalities and the prevalent social discrimination against women and minorities in matters of education, employment, health, housing and justice further exacerbate the effects of an already desparate situation for many of female-heads and it immensely increases their chances of remaining poor for longer periods.[32]

Female-headed households, thus, provide the most stringent measure of poverty in the United States. As the number of families on AFDC increases every year, so do anti-welfare attitudes and the chronic concern for welfare chilselers, and the demoralizing consequences of the welfare state.[33]

THE DISCUSSION

The poverty of female-headed households, thus, is an extremely knotty problem caused by factors at the micro and the macro levels from the past and the present. To an untrained observer, the poverty of female-headed households may be due to their immediate personal and situational circumstances. However, an intelligent observer would look beyond those circumstances to identify the more subtle causes for the current poverty of female-headed households. The causes, thus discovered, would present themselves at many different levels and in many forms. A researcher in this regard should remain particularly alert to the numerous inequalities and injustices to which women have been subjected all over the world for centuries. Only by basing social policies on both the immediate and the more subtle causes for the poverty of female-headed households can social planners expect to achieve more concrete and long-lasting results.

As of now, however, social policies seems to recongnize only the immediate circumstances of female-headed households and even here the major emphasis is on the economic factors in a crude way. The approach is curative rather than preventive and the policies do not take care of the other diverse needs of female-headed households in the educational, economic, social, legal and political areas. The result is that current social policies meet very few needs of female-headed households and in an inadequate way. The other needs simply are ignored.

Effective social policies have to start at the grass-roots of the problem and recognize all the diverse needs of female-headed households. In the long run, what is required in all societies is greater sexual equality early socialization, education, marriage, divorce and property laws, training and hiring policies in the job market, and general family and extra-family roles, the absence of which has been causing the poverty and other problems of female-headed households in the first place. At the same time, a more positive image of female-headed households also needs to be built up. Social policies have to recognize this total need and gradually work toward its achievement while trying to be more and more comprehensive in emphasis.

In the immediate future, what is more urgently required are more egalitarian laws on divorce, more secure financial provisions for female-heads and a greater social support for them to ease their transition into the status of a family-head.[34] Female-heads also immediately require better educational and skill-training programs and more accessable child-care facilities. While such a need is easily recognizable in the United States, it is even more urgent in the case of Third World countries where sexual inequalities and inequities are even greater.

THE FUTURE

The bringing about of required changes is not easy and any new or more comprehensive social welfare program requires more money and cooperation of the other sections of the population. Unfortunately, however, the lower and the middle classes in the United States are already heavily taxed and the affluent do not seem to be willing to give up or redistribute some of what they already have. The attitudes in society toward social welfare programs are also not favorable, and men do not seem willing to act on equality with women at the present time.[35] It appears, therefore, that little significant change in social policies is likely to occur in the near future unless female-heads and the other poor organize into a potent political force and start influencing public opinion and govermental policies. This organization of the least powerful against the powerful is important because as Gunner Myrdal has put it, "no privileged class in history has ever climbed down from its privileges and opened its monopolies out of good will. .....(Idealism)..plays its role only when there is a pressure from below."[36]

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EFFECTS OF A HUMAN RESOURCES DEVELOPMENT PROGRAM ON THE ECONOMIC STATUS OF PUBLIC ASSISTANCE RECIPIENTS*

BY

W. R. Summerhill and C. L. Taylor
Institute of Food and Agricultural Sciences
University of Florida

Introduction

Concern for the less fortunate in the United States has been a widely fluctuating phenomenon, rising and falling with changes in economic conditions, political protest, and the character of political leadership. During the first two centuries of this nation's development, only periodically were public attention and discussion focused on this issue to the degree that concrete action became a top government priority. The latter part of the twentieth century, however, has been characterized by increasing governmental commitment at all levels, not only toward providing for the basic needs of the disadvantaged through various social service programs, but also toward increasing the capabilities of these individuals to become productive units of society. A central component of this governmental thrust has been the underwriting of specialized education and training programs designed to help increase the potential of the disadvantaged for gainful employment at levels sufficient to reduce and preferably to remove their dependency upon public financial aid. Persistent inflation, accompanied by high unemployment rates and steadily increasing public assistance costs, indicates that the future nature and stability of U.S. society may be determined in large part by the degree to which such specialized educational efforts are successful in mainstreaming the underemployed and the unemployed of this nation.

The Problem

One approach to specialized education for the disadvantaged is the Human Resources Development (HRD) program being conducted through the North Carolina Community College System. The HRD program, aimed at the chronically unemployed and underemployed of North Carolina, was implemented as a pilot program in one community college in 1969. By 1978 the program had expanded to include 45 of the System's community colleges and technical institutes, representing an annual expenditure of over $2 million. The central objective of the HRD program, as stated in the program guidelines, is (Sturdivant, 1976, p. 1):

> ...to help the jobless trainee reorient himself or herself to the world of work, appreciate the effects of his or her behavior on others, and develop the basic academic and communication skills prerequisite to obtaining and maintaining employment. This is accomplished through enrollment in an eight weeks (240 hours) class in which the individual reevaluates his self-concept, interacts within a group, learns the rudimentary disciplines associated with obtaining and retaining regular employment,

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> examines some principles of consumer and family financial management, and, when necessary, takes remedial instruction in basic education Throughout the training period and posttraining follow-up period, emphasis is placed on individual counseling in an attempt to help each trainee resolve the sociological, emotional, or economic barriers impeding his vocational progress.

A primary target population, designated as "preferential candidates" for training, are those unemployed individuals who are dependent upon public assistance (Barrett, 1975). As recipients of tax dollars, this population has a significant impact on the availability of funds to support an ever-increasing demand for public services. Consequently, an HRD program objective is to develop within its trainees who are receiving public assistance the coping skills necessary for obtaining and maintaining employment that will result in increased income, greater employment stability, and a concomitant reduced public assistance dependency.

Currently, little empirical evidence exists of the extent to which the HRD program has been successful with this specific target group. In light of the substantial financial and educational resources funded to and expended by the HRD program, as well as its expressed goals, it seemed important to determine the success of the program in significantly improving the economic status of those program participants who were public assistance dependents.

Research Questions

Based on the stated problem, the following questions were formulated as guidelines for the conduct of the research.

> RESEARCH QUESTION 1: What pre/post training changes in income, employment stability, and public assistance dependency, if any, occurred among HRD program completers who, in the year prior to program entry, were receiving some form of public assistance?
>
> RESEARCH QUESTION 2: Were any or all of the posttraining changes in income, employment stability, and public assistance dependency associated with public assistance recipients' personal/social characteristics of age, sex, race, school grade completed, marital status, family status (head/not head-of-household), number of dependent children at home, and class of residence (rural/urban)?

Significance of the Study

This study represents the first comprehensive examination of the impact of the HRD program on program completers who, in the year prior to program entry, were public assistance recipients. In the absence of program data prior to 1974, the findings of this study may be viewed as a baseline assessment of program outcomes and serve as a bench mark for future comparisons.

Identification of associations between the personal/social characteristics of the public assistance recipients under study and indicators of post-training change in their economic status may be useful to program planners in the design, implementation, and evaluation of future programs directed at reducing public assistance dependency of program participants.

Limitations

Application of the findings of the study was limited to HRD program completers who, in the 12 months prior to program entry, were public assistance recipients and for whom posttraining, 12-month follow-up records were available. Behavioral changes due to training can only be inferred from selected indicators of posttraining changes in public assistance recipients' annual income, employment stability, and/or public assistance dependency. The lack of a control population dictated caution in attributing changes in dependent variables to HRD program effects or to personal/social characteristics. Likewise, lack of control over instrumentation and data collection procedures precluded validity and reliability information.

Review of Related Research

Investment in human resources through education is considered by some educators as one of the more effective ways of reducing the future indices of poverty (Ezeocha, 1976). Although isolating the impact of MDTA and CETA programs is difficult and often inadequately accomplished (Goldstein, 1972), a limited number of studies did provide insight as to the effects of participation in MDTA and CETA programs on the economic status of their trainees. Although none of the programs reported in the studies reviewed appeared to be identical in content to the North Carolina HRD program, most contained HRD type components, such as focus on adult basic education and preparation to meet the requirements of the world of work. Consequently, the findings of these studies provided the only research base available for the development of the structural framework for this study.

Impact of Training on Income

Conflicting findings were reported with regard to the impact of MDTA programs on level of trainee income. Studies reported by Jones (1966) and Goldstein (1972) found wages to be higher for MDTA ex-trainees as compared to pretraining levels. A more recent study of selected manpower work and training programs at the local level showed, however, that program completers did not gain financially, as measured by pre/post training wage differences (Harloe, 1976). In addition, no significant correlations were found between completers' characteristics and successful outcomes of training.

Impact of Training on Employment Stability

Program effects appear to be greatly influenced by prevailing economic conditions. During high levels of unemployment, it is almost impossible for program trainees to realize the full benefits of the training received. As unemployment rates drop, however, training benefits appear to become more pronounced (Goldstein, 1972). London (1967, p. 10) reported a delayed but apparent trend toward increased employment stability as a result of MDTA training program participation.

Impact of Training on Public Assistance Dependency

Studies point out that manpower training programs are no substitute for income supplement programs (Goldstein, 1972). Training seemed to increase the earnings of the disadvantaged and to reduce the poverty gap, but continued income supplementation was likely to be necessary for the average completer. Even those studies with the most optimistic results estimated average posttraining annual earnings well below the poverty line.

Personal/Social Characteristics Associated with Training

Most of the studies reviewed indicated that disadvantaged persons are able to derive benefits from training programs. There was evidence that enrollees with such disadvantages as low educational level, long duration of unemployment, and low level of pretraining earnings experienced larger gains from training than those who were less impeded in the labor market (Goldstein, 1972). Harloe (1976), however, noted no relationships between enrollee characteristics and successful training outcomes.

Age

Both Sewell (1971) and the Olympus Research Corporation (1971) found that training had greatest impact on persons under 21 years of age or over 43 years of age. However, Stromsdorfer (1968) reported a significant rate of return only for the 31 to 45 age group.

Sex

The small amount of evidence available favored males over females in terms of increases in earnings as a result of training (Goldstein, 1972).

Race

Hardin and Borus (1971) and the Olympus study (1971), concluded that whites benefited more from training than nonwhites. However, the findings of a study of MDTA program effects from the mid-1960s to the early 1970s revealed no significant difference between change in income of nonwhite as compared to white MDTA program completers (Reid, 1976).

Education

Sewell (1971) found that, regardless of the measure of benefits (increase in earnings, employment, or wage rate), institutional training had greater impact on those with less than a high school education than for all other institutional trainees. These results were supported in studies by Hardin and Borus (1971) and the Olympus Research Corporation (1971). Stromsdorfer (1968) found no improvement in either earnings or employment stability for high school graduates, but a high rate of return for program participants with a grade school education and for high school dropouts.

Family Characteristics

Two studies attempted to establish the relationship between the variables marital status, household head, or number of dependents and the effectiveness of training (Stromsdorfer, 1968; Olympus, 1971). The findings of these studies revealed no significant relationships between the variables and training effectiveness.

Class of Residence (Rural/Urban)

The question of whether training has a differential impact on program completers in urban and rural locations apparently has not been well investigated. The large job market, the diversified industrial structure, and the high rate of employee turnover in an urban area suggest that program completers in that area might enjoy an employment advantage over those in a rural area. Although little treatment of this question was found in the literature, it is conceivable that no differential impact exists (Goldstein, 1972).

Methodology

To provide a basis for assessment and evaluation of program results, the Department of Community Colleges designed and implemented an HRD data collection system which has collected and computer-stored substantial data describing selected personal/social characteristics and economic status of HRD program completers for a period of one year prior to program entry and one year following program exit. The availability of those data enabled the initiation of this pre/post training longitudinal assessment of HRD program impact. This study was undertaken in the full knowledge that the use of an existing data bank sacrifices substantial influence and control over selected aspects of research methodology, including research design, selection of study population, instrumentation, and data collection procedures.

The research design for this study was limited to the One-Group Pretest-Posttest Design described by Campbell and Stanley (1966). This design provides a comparison between performance by the same group of subjects before and after exposure to treatment and a control for selection and mortality variables, assuming that the same subjects appear in both the pretests and the posttests. However, the absence of a control population in this study was a disadvantage, since it precluded any assurance that the treatment was the only factor influencing pretest-posttest differences.

As an adjunct to the pretest-posttest research design, possible associations were examined between the dependent variables of change in direction and amount of annual income, change in direction of employment stability, and change in direction of public assistance dependency and the selected personal/social characteristics.

Population

The target population for this study consisted of 344 HRD program completers who had been public assistance recipients in the year prior to their entry into the HRD program. Trainee profile data were collected at entry to the HRD program. Included were personal/social, economic status, and employment data. Posttraining follow-up profiles were collected by HRD program personnel on program completers by interview 3 months, 6 months, and 12 months following program exit. This study focused only on program completers who had 12-month follow-up records and who were pretraining public assistance recipients.

Analysis of Data

Analysis of the data involved three stages: (1) identification of selected characteristics of HRD program completers; (2) assessment of pre/post training changes in economic status--annual income, employment stability, and public assistance dependence; (3) determination of any relationships between those changes and selected personal/social characteristics.

Findings

Participant Profile

The "typical" public assistance recipient enrolled in the HRD program appeared to be a nonwhite female who was over 25 years of age and who had completed 9.9 school grades; was most likely to be either separated, divorced, or widowed; was head of her household; had at least three dependent children at home; and lived in an urban area. Her annual income during the year prior to program entry was $1668, which was augmented by $213 per month from public assistance. She was employed for only 15 of the 52 weeks prior to program entry. Unemployed when she entered the HRD program, this typical public assistance recipient received 183 training contact hours, primarily in communication, computational, and human relations skills and was placed in a job upon program exit. In the year following program exit, her annual income was $2513, augmented by $155 per month from public assistance. She had held only one job, of a temporary or seasonal nature, which was terminated after 23 weeks.

Annual Income

The economic status of HRD program completers who in the year prior to program entry were public assistance recipients changed significantly in a positive direction during the year following program exit. A t-test of mean annual pretraining income (n=225; $\bar{x}=\$1668$) versus mean annual posttraining income (n=272; $\bar{x}=\$2513$) was significant at the .01 level. The mean difference was $845 in favor of posttraining annual income.

Individual success in improving posttraining annual income is indicated by a simple frequency distribution of public assistance recipients according to direction of pre/post training annual income change (Table 1). By almost a two to one margin, those recipients who reported both pretraining and posttraining income figures increased their posttraining annual income.

Table 1. Frequency distribution of public assistance recipients by direction of change in pre/post training annual income

Direction of change in annual income	Public assistance recipients	
	f	%
Posttraining annual income greater than pretraining annual income	118	65.6
Posttraining annual income less than pretraining annual income	62	34.4
Total	180	100.0

Weeks Unemployed

A t-test of mean weeks unemployed in the year prior to program entry (n-333; $\overline{x}$=37.0) versus mean weeks unemployed in the year following program exit (n=344; $\overline{x}$=28.5) was significant at the .01 level. The mean difference was 7.5 fewer posttraining than pretraining weeks unemployed.

Individual success in increasing employment stability after program exit is indicated by a simple frequency distribution of public assistance recipients according to direction of change in pre/post training weeks unemployed (Table 2). A majority (52.0 percent) of the recipients decreased their unemployment rate in the year following program exit.

Table 2. Frequency distribution of public assistance recipients by direction of change in pre/post training weeks unemployed

Direction of change in weeks unemployed	Public assistance recipients	
	f	%
Pretraining weeks unemployed greater than posttraining weeks unemployed	179	52.0
Pretraining weeks unemployed equal to posttraining weeks unemployed	50	14.5
Pretraining weeks unemployed less than posttraining weeks unemployed	115	33.4

Public Assistance Dependency

A t-test of pretraining mean monthly dollars of public assistance (n=344; $\overline{x}$=\$213) versus posttraining mean monthly dollars of public assistance (n=344; $\overline{x}$=\$155) was significant at the .01 level. The mean difference was $58 in favor of reduced public assistance in the year following program exit.

Individual success in decreasing posttraining levels of public assistance is indicated by a frequency distribution of public assistance recipients according to direction of pre/post training change in public assistance dependency (Table 3). Almost 50 percent of the recipients received less posttraining than pretraining public assistance and approximately 31 percent remained at the same level of dependency. The remaining approximately 20 percent received greater amounts of posttraining than pretraining public assistance.

Table 3. Frequency distribution of public assistance recipients by direction in change in pre/post training public assistance levels

Change in public assistance levels	Public assistance recipients	
	f	%
Posttraining public assistance less than pretraining public assistance	169	49.2
Posttraining public assistance equal to pretraining public assistance	105	30.5
Posttraining public assistance greater than pretraining public assistance	70	20.3
Total	344	100.0

Relationships Between Variables

Chi-square tests were performed to test for relationships between the eight personal/social variables, and the pre/post training direction of change in annual income. Tests revealed only one significant (.05 level) association, which was between change in direction of income and sex, race, and class of residence combined. A greater number than expected of nonwhite females from a rural environment showed decreased posttraining annual incomes.

Chi-square tests were utilized to test for relationships between the eight personal/social characteristics and combinations thereof and the pre/post training change in amount of annual income. No significant relationships were found.

Relationships between the eight personal/social characteristics and combinations thereof and the pre/post training change in direction of employment stability were also examined. Only one of the personal/social characteristics, class of residence (rural/urban), was significantly (.05 level) associated with change in direction of employment stability. A greater number of public assistance recipients from a rural environment were successful in reducing posttraining weeks unemployed than would be expected.

When the relationship between class of residence (rural/urban) and change in direction of employment stability was analyzed further by sex, a significant (.05 level) association was revealed. The combination of sex with class of residence was significantly associated, with rural females being more successful in reducing posttraining weeks unemployed than would be expected.

Chi-square tests also were utilized to test for relationships between the eight personal/social variables and combinations thereof and the pre/post training change in direction of public assistance dependency. The chi-square values revealed three significant (.05 level) associations--change in direction of public assistance dependency and (1) school grade completed,

(2) school grade completed by sex, and (3) school grade completed by sex and age. Fewer nonwhite females who had completed eight or less school grades decreased their posttraining public assistance dependency than would be expected. The tendency was for larger numbers of nonwhite females who had completed 9-11 school grades to decrease posttraining public assistance dependency than expected, and larger numbers of nonwhite females who had completed 12 or more school grades to remain at their pretraining level of public assistance dependency.

Conclusions and Implications

In general, participation in the HRD program appeared to have made a positive contribution toward helping public assistance recipients to increase their annual income, increase their employment stability, and reduce their public assistance dependency. Significant pre/post training differences were noted for all three of these indicators of economic status. In the year following program exit, the mean annual income of the public assistance recipients increased by 51 percent, weeks unemployed decreased by 20 percent, and their public assistance dependency decreased by 27 percent. These positive changes take on added significance when one considers that during the period of study the North Carolina rate of unemployment increased dramatically, from 4.5 percent to 8.6 percent of the civilian labor force.

The conclusion of an increase in income following training appears to suppost the findings of previous studies by Jones (1966), London (1967), Goldstein (1972), and Ashenfelter (1975).

Although increased, mean annual income after program exit for these recipients remained below that established as the poverty level for an individual male ($3069) or female ($2804), and approximately 57 percent less than the $5790 established as poverty level for a family of four with a female head-of-household (Bureau of the Census, 1977). Even with a 20 percent posttraining reduction in weeks unemployed, the average total employment for the study population in the year following program exit was less than six months. Although the overall level of public assistance funding for the study group declined, approximately 50 percent showed no reduction in public assistance dependency in the year following program exit. This apparent inability of public assistance recipients to attain economic sufficiency and subsequent freedom from public assistance dependency presents a continuing challenge to the HRD program and similar programs of continuing education for the disadvantaged to identify and alleviate those factors that inhibit the economic advancement of their program participants.

In addition to a general assessment of program impact, this study sought to determine the relationship of selected personal/social characteristics of the study population to posttraining success in increasing their annual income and employment stability, and reducing their public assistance dependency. At best, selected personal/social characteristics were only marginally related to program outcomes. The only statistically significant associations revealed by the data analyses involved class of residence (rural/urban) and school grade completed.

Nonwhite females from a rural setting showed a greater tendency to reduced annual income in the year following program exit than did their urban counterparts. Rural female public assistance recipients tended to show a greater increase in employment stability in the 52 weeks following program exit than did their urban counterparts.

School grade completed was associated with reduction in public assistance dependency following program exit, but only for nonwhite females. Nonwhite females who had completed more than eight school grades showed less public assistance dependency after program exit than did those nonwhite females who had less education.

The aforementioned associations between personal/social characteristics of indicators of economic status, although limited, tended to refute Harloe's (1976) finding of no significant associations between completer characteristics and successful outcomes of local training programs in California. The findings of no association between program outcome and age of program completers is contrary to those reported by Stromsdorfer (1968), Sewell (1971), the Olympus Research Corporation (1971), and Andrews (1971). The findings of no association between program outcomes and marital status, family status (head/not head of household), and number of dependent children at home supported those of Stromsdorfer (1968), and the Olympus Research Corporation (1971).

The findings of this study make it reasonable for one to conclude that factors other than the personal/social characteristics examined were associated with variations in program outcomes. A key to further investigation might be the psychological realm of the public assistance recipient. The psychological factors of locus of control and self-concept have been shown to have significant bearing on the ability of the disadvantaged to cope with and adapt to dynamic forces that are operative in the world of work (Tiffany *et al*., 1970; O'Toole, 1975a; Abicht, 1976). Locus of control has been shown to influence the individual's response to stress and uncertainty. Persons who are internally controlled tend to see obstacles as surmountable and to respond adaptively to stress. However, to externally controlled individuals, frustration becomes debilitative and anxiety reactions increase. These conditions of internal and external control apparently are linked with individual self-concept. The more an individual feels that he has little or no control over his external environment, the more fragmented his self-concept tends to become, thus generating ambivalence, doubt, fear, and a sense of powerlessness. This mental state subsequently influences the individual's capacity to seek and to maintain employment (Tiffany, *et al*., 1970). It would indeed seem important to determine if this association holds true for the public assistance recipient population of this study. If so, consideration of the aforementioned psychological factors in future program design, implementation, and evaluation possibly could do much toward elevating public assistance recipients to a higher level of perceived self-worth and hence economic sufficiency.

This paper is part of a larger study of the HRD program conducted by William Summerhill, University of Florida, and Robert G. Tyndall, University of North Carolina at Charlotte.

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SESSION K

STATUS ASPIRATIONS AND ATTAINMENTS

ASPIRATION AND ATTAINMENT: A PRELIMINARY VIEW OF THE ALABAMA YOUTH PANEL, 1966-1979, Steve Haynes and John Dunkelberger, Auburn University.

RESIDENTIAL AND MOBILITY PREFERENCES IN THE FORMATION OF LIFE PLANS, Frank M. Howell, Mississippi State University.

Aspiration and Attainment: A Preliminary Look at the 1972 Alabama Youth Panel*

Steven D. Haynes and John E. Dunkelberger
Auburn University

Since 1966 researchers in Alabama and several other Southern states have been involved cooperatively in a longitudinal survey of rural youth and young adults. Geographically the study focuses on four counties in Northeast Alabama lying within the confines of the Southern Appalachian region. This area is one characterized by its ruralness and lack of economic development (Kern, et al., 1966).

In any model for economic development, one of the key ingredients is the area of youth and young adults. The status attainment literature includes several national studies of the status attainment process (Project Talent and the National Longitudinal Study, to mention two). However, one limitation of these studies is their inability to focus on a specific geographic area with any degree of reliability (Picou and Carter, 1976).

Purpose

This study represents a continuation of efforts to supplement national and regional level analyses with smaller scale longitudinal efforts involving particular socio-cultural areas. Appalachia has long been recognized as culturally different with unique developmental problems (Appalachian Regional Commission). High rates of out-migration of youth to urban areas outside the Appalachian Region has been documented (Youmans, 1959). Because of the poor school attendance, high dropout rates and less adequate educational opportunities there has been a depressant effect on the attainments of these youth throughout their adult lifetime.

What is the life history of typical youth from the Northeast Alabama area? The present report is offered as a very preliminary presentation of data collected during 1979 from a panel of Appalachian youth currently averaging 29 years of age. Attention is given to their status attainments in four key areas—education, occupation, family and residence.

Sample and Procedures

The study has evolved in four stages beginning in 1966 when sophomores in a random sample of 17 high schools in the four-county sample area completed questionnaires. A second stage was conducted in the same high schools in 1968 when the same students were re-surveyed as seniors. From the students contacted both years, a panel consisting of 315 names was developed. Third stage contact was made in 1972 when 292 (92.7%) were interviewed, either personally or by telephone. Fourth-stage contact was only recently completed involving over a year of effort at relocating panel participants and obtaining complete questionnaires. Using a mail questionnaire approach, supplemented by personal and telephone interviews with the non-respondents, information was obtained on 290 panel members (95.9%). Of this number, one was deceased, five could not be relocated, and four refused to participate. The existing panel consists of 143 males and 137 females which includes 13 black males and 23 females. (This Appalachian area has a relatively small black population.)

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*Paper presented at the annual meeting of the Southern Association of Agricultural Scientists, February 1980, Hot Springs, Arkansas. Data are from Southern Regional Project S-114 and Alabama Agricultural Experiment Station Project (Hatch) AL-440.

Descriptive Findings

Educational Attainments (Table 1). Two aspects of education are considered--the kinds of programs and the highest level completed. Because of the panel design which was constructed from a sample of youth who had completed questionnaires both as sophomores and seniors, all panel members reported receiving a high school diploma. The most common type of additional education was a college bachelor's degree, followed by a junior of community college associate degree. Except for training in business education, men were more likely than women to have completed all types of additional education programs.

Data on the highest level of education completed reveals another dimension of education. Most important is the observation that only about one quarter of these young people failed to complete some form of post high school training. Men were less likely than women to have stopped their education at the high school level. For many youth, vocational and business training or two-year associate degree were only preludes to other types of education.

Occupational Attainment (Table 2). Current or most recent employment status revealed that the majority of the panel members were employed in some kind of job or profession. Men were much more likely than women to be employed, however consistent with national trends, almost two-thirds of the women were employed.

The nature of this employment from the standpoint of the employer-employee relationship was revealing. Only 8 percent were self-employed (including family business). Males were more likely to hold this status than women. Government employment accounted for almost one-third of the jobs (28.6%) and private companies or individuals for less than 60 percent.

Types of occupations held were led by the operatives and laborers categories involving low or limited skills (28.2%). The category of skilled craftsmen was distinctly important for males while sales and clerical workers were heavily occupied by females. One-third of the panel members were in professional, technical and managerial occupations with males predominating in the managerial types. Only four males were in farming, although the respondents were raised in rural areas.

Family Attainment (Table 3). The typical pattern at this stage in the life-cycle was to be married. Signs of the times were apparent however, as 10 percent were either separated, divorced or living together. Another 10 percent had never married. No differences were observed between men and women in this regard as they were equally likely to have either status.

Children are commonly an important aspect of family life for young adults. Slightly more than one-quarter of the panel members had no children. Although males were less likely to have children than females, this difference was small.

Residence Attainment (Table 4). Over half of the panel members reported they were living in a rural area outside of an urban place of 10,000 population or larger. That is, they continue to live in the same type area as the one in which they were reared. This is in spite of the fact that two of the largest towns in the area now had populations in excess of 10,000 inhabitants and those living in these hometowns were excluded from this number. Only 22 percent now lived in cities of 50,000 or larger, while one-third lived in the open country. Women were only somewhat more likely to live in cities and less likely to have a rural residence than men.

Migration, considering the shortrun condition of parental residence in 1968 to 1972 and 1968 to 1979, both reveal that the majority of these young adults have not been particularly prone to long distance moves. More than half were living in the same county as the one in which they attended high school. This was true in both 1972 and 1979. Three of the home counties involved common borders with Georgia and Tennessee, yet only 8 percent in 1972 and 7 percent in 1979 lived in either of these adjacent states. Moreover, only 8 percent lived beyond the boundaries of Alabama, Georgia and Tennessee in 1979. Clearly, the panel members have not been migration prone, however this must be assessed in light of the potential bias that migrants may be disproportionally represented among the panel members not recontacted in the 1972 and 1979 phases of the study. Relocation information on these cases does not indicate that this possibility has occurred.

Conclusions

One of the central concerns of this study of Appalachian rural youth in Alabama has been with aspirations and expectations for status attainment. The present data describes the four major status attainment areas dealt with in the study and provides a preliminary overview of the statuses achieved. Further analyses will be initiated which will focus more specifically on the relationship between aspiration and expectation and antecedents and status attainments in these areas. The process of status attainments among rural youth as they progress through young adulthood should provide additional information and knowledge to the growing body of status attainment research.

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Table 1. Educational Attainment: Programs Completed and Highest Level

Characteristic	Male (N = 143)		Female (N = 137)		Total (N = 280)	
	No.	%	No.	%	No.	%
Programs Completed						
High School Diploma	143	100.0	137	100.0	280	100.0
Military Training	44	30.8	2	1.5	46	16.4
Vocational Program	36	25.2	13	9.5	49	17.5
Business Education	14	9.8	24	17.5	38	13.6
Associate Degree (2 yrs.)	39	27.3	28	20.4	67	23.9
Bachelor's Degree (4 yrs.)	47	32.9	38	27.7	85	30.4
Master's Degree	17	11.9	12	8.8	29	10.4
Professional Degree	6	4.2	1	0.7	7	2.8
Highest Level Completed						
High School Diploma	31	21.7	49	35.8	80	28.6
Vocational Program	29	20.3	9	6.6	38	13.6
Business Education	7	4.9	19	13.9	26	9.3
Associate Degree (2 yrs.)	28	19.6	22	16.6	50	17.9
Bachelor's Degree (4 yrs.)	26	18.2	26	19.0	52	18.6
Master's Degree	16	11.2	11	8.0	27	9.6
Professional Degree	6	4.2	1	0.7	7	2.5

Table 2. Indicators of Occupational Attainment

Characteristic	Male (N = 143)		Female (N = 137)		Total (N = 280)	
	No.	%	No.	%	No.	%
Employment Status						
Currently Employed	127	88.8	90	65.7	217	77.5
Currently Unemployed	14	9.8	43	31.4	57	20.4
Not Reported	2	1.4	4	2.9	6	2.1
Current Employer						
Private Company or Individual	79	55.2	86	62.8	165	58.9
Government	43	30.1	37	27.0	80	28.6
Self-employed	16	11.2	5	3.6	21	7.5
Family Business or Farm	2	1.4	0	0.0	2	0.7
Not Reported	3	2.1	9	6.6	12	4.3
Type of Occupation						
Professional and Technical	34	23.8	37	27.0	71	25.4
Managers and Administrators	20	14.0	9	6.6	29	10.4
Sales and Clerical Workers	10	7.0	41	30.0	51	18.2
Craftsmen	31	21.7	2	1.5	33	11.8
Operatives and Laborers	41	28.7	38	27.7	79	28.2
Farmers	4	2.8	0	0.0	4	1.4
Not Reported	3	2.1	5	3.6	8	2.9

Table 3. Marital and Family Status

Characteristic	Male (N = 143)		Female (N = 137)		Total (N = 280)	
	No.	%	No.	%	No.	%
Marital Status						
Married	113	79.0	113	82.5	226	80.7
Separated	4	2.8	5	3.6	9	3.2
Single, Never Married	15	10.5	12	8.8	27	9.6
Divorced	10	7.0	7	5.1	17	6.1
Living Together	1	0.7	0	0.0	1	0.4
Family Status						
Children	99	69.2	104	75.9	203	72.5
No Children	44	30.8	33	24.1	77	27.5

Table 4. Current Place of Residence and Extent of Migration

Characteristic	Male (N = 143)		Female (N = 137)		Total (N = 280)	
	No.	%	No.	%	No.	%
Place of Residence (1979)						
On a Farm	21	14.7	12	8.8	33	11.8
Open Country	29	20.3	30	21.9	59	21.1
City Under 10,000 pop.	29	20.3	24	17.5	53	18.9
10,000 - 50,000 pop.	38	26.6	36	26.6	74	26.4
50,000 - 500,000 pop.	15	10.5	25	18.2	40	14.3
Over 500,000 pop.	11	7.7	10	7.3	21	7.5
Migration (1968-1972)						
Living in Same County	79	55.2	71	51.8	150	53.9
Living in Adjacent County	22	15.4	20	14.6	42	15.0
Other County, Same State	25	17.5	27	19.7	52	18.6
Adjacent State	9	6.3	14	10.2	23	8.2
Other Southern State	5	3.5	3	2.2	8	2.9
Outside the South	3	2.1	2	1.5	5	1.8
Migration (1968-1979)						
Living in Same County	83	58.0	80	58.4	163	58.3
Living in Adjacent County	12	8.4	14	10.2	26	9.3
Other County, Same State	25	17.5	26	19.0	51	18.2
Adjacent State	7	4.9	11	8.0	18	6.4
Other Southern State	7	4.9	2	1.5	9	3.2
Outside the South	9	6.3	4	2.9	10	4.6

RESIDENTIAL AND MOBILITY PREFERENCES IN THE FORMATION OF LIFE PLANS

Frank M. Howell

Mississippi State University

ABSTRACT

Researchers have shown that status advantages in occupational attainment accrue to men who migrate to either rural or urban locales, or from their origin communities. Actual migrants are thought to hold superior "qualifications" and "prospects" for socioeconomic success. The present research examines the formation of residential and geographic mobility preferences, along with similar orientations toward education, occupation, marital timing, and fertility, as they relate to the known antecedents of educational aspirations. Only modest evidence is found to support the notion that rural high school students who prefer to live in a more urban area or away from community origins hold superior ability, performance, or status aspirations. Occupational and residential aspirations are substantively linked only among white males, and this covariation is only nominally reduced by controls for status origins, family size, ability, performance, and parental expectations for schooling. The similar linkage between educational and geographical mobility aspirations, however, is reduced to a trivial level after such controls. In general, white males are most congruent to the proposed attitudinal contingency pattern. Future research directives are specified.

Due to space limitations only the abstract is included in these proceedings. For a copy of the paper please write the author at the following address:

Department of Sociology
P. O. Drawer C
Mississippi State University
Mississippi State, Mississippi 39762

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SESSION L

POTPOURRI

FACTORS ASSOCIATED WITH INTERACTION PATTERNS BETWEEN COLLEGE STUDENTS AND GRANDPARENTS, Vernice LaDonna Stockton and Elisabeth J. Stojanovic, Mississippi State University.

RURAL SOCIOLOGY IN THE 1980's: POSITIVISTIC OR APPLIED?, Wayne A. White, Kansas State University.

THE CRITERIA DILEMMA AND EVALUATING EXTENSION PROGRAMS, C. L. Taylor and W. R. Summerhill, University of Florida.

Factors Associated with Interaction Patterns of Rural-Urban College Students with Their Grandparents - Preliminary Findings

Vernice L. Stockton*
Elisabeth J. Stojanovic**

Despite a proliferation of information focusing on intergenerational interaction patterns, little attention has been focused on the relationship of young adults with their grandparents. In the absence of empirical data it has been necessary to make assumptions about the young adult grandchild from the attitudes and behavior of his parents. Even though the parents' own relationship with their parents as well as their attitudes and beliefs have been found to transfer to the child often with the parent as a mediator (Robertson, 1976; Tibbitts, 1977), the young adult may not be totally controlled by the attitudes and behaviors of his parents. Since studies on these types of behavior are limited, it seems appropriate to refer to the literature on the relationships of adult children to their parents and then draw parallels. Upon doing this, several significant factors emerge such as location, distance, age, living arrangements, health, marital status, sex, value differences, type of relationship and other forms of interaction (Britton, et. al., 1961; Smith, 1965; Loether, 1967; Bultena, 1968; 1969; Kahana and Kahana, 1971; Bild and Havighurst, 1976; Robertson, 1976; Tibbitts, 1977).

Operating under the afore-mentioned premise, that the young adult grandchild follows the attitudinal and behavior patterns of his parents, several hypotheses were generated:

Hyp. 1 Young adult grandchildren from rural areas visit their grandparents more frequently than those from urban areas.

Hyp. 2 The frequency with which young adult grandchildren visit grandparents increases with closer physical distance.

Hyp. 3 The older the grandparent the more frequently visits occur by the young adult grandchild.

Hyp. 4 Grandparents in poor or fair health are visited more frequently by young adult grandchildren than those in good health.

Hyp. 5 Maternal grandparents are visited more frequently by young adults than are paternal grandparents.

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* Graduate Assistant, Department of Sociology, Mississippi State University.

** Associate Professor, Department of Sociology, Mississippi State University.

Hyp. 6 Frequency of interaction patterns between young adult grandchildren and grandparents is greater when the perceived relationship is positive.

Since kinship ties are reputedly strongest on the mother's side of the family, we dichotomized the interactions in relation to paternal and maternal grandparents and attempted to determine their significance in relation to the student's background (i.e. rural-intermediate-urban). This study reports the preliminary findings; further analyses are planned. For instance, a variety of scoring and/or scaling techniques will be used to check the validity of our measuring instrument of the "quality of relationship" variables. The findings from the preliminary study will also serve to generate hypotheses for future testing possibly by correlation and multiple regression techniques.

Review of the Literature

According to several social theorists the increased pressures of urbanization, high rates of geographic mobility and increased cultural differences have precipitated a decline in the extended family and weakened interfamilial kinship ties. The differential effect of these factors on the rural and urban populations has become debatable, especially in intergenerational differences. The aged living in a rural setting reputedly possess stronger kinship ties, and experience more social integration than their urban counterpart (Fischer, 1972). Yet, the reverse has also been found to be prevalent. The extended family is more important to the individual in the urban setting than in the rural setting because of the difficulty in establishing satisfactory primary relationships (Smith, 1965; Hynson, 1975). Bultena in measuring interaction patterns between the aged concluded that the elderly in urban areas tended to have smaller families but with a greater proportion living nearby or available for frequent contact than the rural elderly who tended to have larger families with fewer children living nearby, though a significant proportion had at least one child living close to them (Bultena, 1968; 1969).

Even though extensive geographic mobility of the young is seen as a major factor in early isolation and diminishing contact between generations most elderly live within close proximity of at least one of their children (Loether, 1967; Bultena, 1969; Tibbitts, 1977). Two out of every three of the older generation either share a household or live within thirty minutes of at least one of their children (Tibbitts, 1977). Even though Bultena (1969) found that more urban children (i.e. half of his sample) lived in the same community as their parents than rural children (i.e. one fourth of his sample) frequency of interaction was similar for the urban and rural samples, and at least once a week for those living within the community. In a later study, Bild and Havighurst (1976) using a totally urban sample similarly found that slightly less than two thirds of the aged saw their children and/or grandchildren weekly or more often. Study of a generalized population, not controlling for rural-urban differences, yielded comparable results. Tibbitts (1977) reported that over three fourths of the aged who were not living with their children saw one or more of them at least once a week.

The elderly, like the young, value an independent mode of living. Most older people believe they should maintain independent lives as long as it is physically, emotionally and financially possible (Britton, et. al., 1961; Loether, 1967). Many aged who live with their children and grandchildren frequently find the arrangement unsatisfactory because of overcrowding, lack of privacy and over exposure to grandchildren who they enjoy "occasionally at close range, but generally at long range" (Loether, 1967). However, of the American elderly who have one or more adult children, over a fourth (mostly widowed) live with one of those children (Tibbitts, 1977). This is especially true of widows, who more frequently live with one of their adult children while aged widowers tend to live alone more frequently (Smith, 1965). Tibbitts (1977) also found that neither the parents' marital status nor their living with another child affected the frequency of visits. This did not support Bultena who found that the older the person becomes the greater the frequency of interaction with children and grandchildren, especially if the elderly person lives alone (Bultena, 1968). This is particularly true for men whose social contacts appear to be limited to their spouses, children, grandchildren and a small number of intimate friends; while women enjoyed a wider range of contacts (Powers and Bultena, 1976). If the elderly person is institutionalized, however, then frequency of interaction with his children and especially his grandchildren decreases (Kahana and Kahana, 1971). Generally, however, there seem to be stronger kinship ties between the nuclear family (i.e. husband, wife, children) and the wife's family (maternal grandparents) than the husband's family (paternal grandparents) (Smith, 1965; Fischer, 1972). Daughters tended to live closer to parents and exhibited a higher degree of interaction than sons who apparently were not expected to attain a similar interaction level (Heltsley and Powers, 1975).

The parents' own relationship with their parents as well as their attitudes and beliefs tend to transfer to the child (Robertson, 1976; Tibbitts, 1977). Children tend to hold more positive attitudes toward their aged grandparents if their parents reflect positive attitudes. These familial attitudes toward the aged differ with the health of the aged parents. More positive attitudes are projected if parents are in good health, have positive self-images and are active and independent. More negative attitudes arise when the aged exhibit poor health and are dependent (Tibbitts, 1977). Bengtson (1975) found considerable similarity in intergenerational attitudes and values with each generation showing the same underlying values overlapping between generations. He concluded that most values are transmitted intrafamilially, though some are transmitted intergenerationally from grandparent to grandchild (Bengtson, 1975), and supported by Christenson (1977).

The types of behavior the young adult grandchild expects from his grandparent are frequently different from that of his younger counterpart. The older the grandchild becomes the less he values the more concrete signs of affection such as gift giving and the more he values a grandparent who shares his attitudes and activities. If the grandparent continues to relate on this concrete level then rapport may decrease and distance may increase (Kahana and Kahana, 1971). Most adult grandchildren visited their grandparents, not because they were expected to or because their parents did, but because they loved them and genuinely enjoyed visiting them (Robertson, 1976). This is mainly due to their perception of the grandparent. In Robertson's study (1976) young adult grandchildren viewed the grandparent/grandchild relationship as one between friends rather then as a nonequalitarian relationship, such as with a respected elder. They also did not feel that their grandparents were bores (Robertson, 1976). This is in great contrast with Rosow who a decade earlier found that intergenerational visiting patterns were more ritualistic and visiting took place because it was expected or parents just took their children along.

With the increased mobility of the young, distance seems to preclude much of the face-to-face interaction necessary for maintaining a viable relationship between the aged, their children and/or grandchildren. In many instances these greater distances limit visiting to special occasions and vacations (Smith, 1965; Hoffman, 1970; Mead, 1977). Other than visiting, the most frequent forms of communication between grandparents and grandchildren are telephoning, writing letters and post cards, and sending small gifts (Mead, 1977). This has also contributed to the change in the grandparent's role. The grandparent role today has evolved to that of babysitter, gift giver and relator of family history (Kahana and Kahana, 1971; Mead, 1977). Teenage and adult grandchildren expect little from their grandparents except some gift giving and conveying of family history; they are not seen as confidants or as a source of financial support (Robertson, 1976).

Methodology

Data for this study were obtained from responses to a questionnaire administered to undergraduate students at Mississippi State University who were enrolled in introductory sociology classes in 1976. Construction of the questionnaire entailed a series of forced and open answered questions structured to differentiate between paternal and maternal grandparents. Even though whole class, nonrandom samples were surveyed, the respondents in each class were representative of the various areas of specialization on campus.

Level of significance was assessed using a Chi-Square (X^2) test. A series of independent variables (location, distance, ages of grandparents, health, living arrangements, marital status, other forms of interaction other than face-to-face, quality of relationship, grandparental role) were cross tabulated with the dependent variables "frequency of visits to paternal and maternal grandparents" to determine if a statistically significant (P .05 or less) relationship existed.

The study sample consisted of 137 young adult college students. Since we were only concerned with those respondents who had grandparents, the sample was limited to those respondents who had at least one living grandparent and whose grandparents were not separated from each other (i.e. separation of a pair of grandparents through institutionalization or divorce). The sample was composed of 52% males and 48% females with a disproportionate number of respondents below the age of twenty (79%). As one would expect from such a young sample approximately 2/3 of the respondents were single. The sample was also disproportionately white (83%).

Our rural-urban index was determined by the variable "location of parents' home" and categorized according to the United States Bureau of Census (e.g. less than, 2,500 population (rural), 2,500 to 49,999 (intermediate), 50,000 or more population (urban). The respondents in the sample were divided among these categories: 26%, 44% and 30% respectively. The dependent variables concerned the frequency with which young adult grandchildren visited their maternal and paternal grandparents. These were operationalized by weekly or more often, monthly or more but not weekly, every few months, yearly or less and never.

Findings

According to the literature, factors influencing interaction patterns between adult children and their aged parents included location, distance, age, health, marital status, living arrangements, other forms of interaction (i.e. gift giving, writing or phoning), and attitudes (Britton, et. al., 1961; Smith, 1965; Loether, 1967; Rosow, 1967; Bultena, 1968; 1969; Hoffman, 1970; Kahana and Kahana, 1971; Wake and Sporakowski, 1972; Youmans, 1973; Bild and Havighurst, 1976; Tibbitts, 1977). Since the attitudes and beliefs as well as interaction patterns of adult children and their aged parents are expected to be internalized by their children, we used these factors to determine if the adult grandchild retains a similar relationship with his/her grandparents. Table 1 shows the statistical significance of these variables in relation to the frequency with which college students visited their paternal and maternal grandparents. The variable "location of parents' home" showed a statistically significant relationship for visits to paternal grandparents but not for visits to maternal grandparents. Students from rural areas were more likely to visit both sets of grandparents on a weekly basis than those in urban areas. For those students who visited grandparents less than weekly (i.e. monthly, every few months, yearly or less) location became less important. We reject our hypothesis that young adults from rural areas visit their grandparents more frequently than their urban counterpart because visiting patterns differ according to set of grandparents (i.e. paternal or maternal).

Distance, another factor traditionally associated with interaction patterns proved to be highly significant for visits with both paternal and maternal grandparents. The shorter the physical distance separating the student and his grandparent the more frequent the interaction on a face-to-face level. We found that more than one-third of our sample (38%) lived within 30 miles of their maternal grandparents while slightly less than one-fourth (23%) lived this distance from their paternal grandparents. Those students living within a 30 mile radius visited grandparents weekly or more frequently than those living farther - the greater the distance the less visitation. In controlling for rural-urban differences we found

Table 1. Factors Associated with Frequency of Visits to Paternal and Maternal Grandparents (GPs)

Characteristics	Significance of Differences in Frequency of Visits to			
	Paternal GPs		Maternal GPs	
	N	$P(X^2)$	N	$P(X^2)$
Location of Parents' Home	93	.05	118	NS
Distance to GPs' Home	91	.001	116	.001
Living Arrangements	87	.05	113	.05
Ages of Grandfathers	41	NS	68	NS
Ages of Grandmothers	80	NS	109	NS
Health of GPs	50	NS	58	NS
Student's Actions:				
Write or Phone	93	.01	117	NS
Remember Birthdays, Special Occasion	93	NS	118	NS
Help when Lonely	92	NS	117	.05
Give Room in Own Home	92	NS	117	NS
Confide in GPs	92	.05	117	NS
Go to GPs for Advice	92	NS	118	NS
Carry on a Good Conversation	93	NS	117	.05
Value Differences	92	.01	116	NS
Student's Perception of GPs	86	NS	117	NS
Enjoy Visits	90	.05	116	NS
Grandparents' Actions:				
Write or Phone	92	NS	116	NS
Give Presents	93	NS	117	NS
Moral or Financial Support	93	NS	117	NS
Visit Students	92	NS	117	NS
Reminisce/Student Enjoys	93	.05	118	.001

* Total number of respondents for Paternal GPs = 93; Total number of respondents for Maternal GPs = 118. Differences in Ns on selected variables are due to failure of student to respond to the question or the question did not apply to the student.

that for both sets of grandparents rural students lived closer to grandparents and visited them more frequently than their urban counterpart; even those students with rural backgrounds and whose grandparents lived further away (90 miles or more) visited them more frequently than those with urban backgrounds. Therefore, we accept the hypothesis. These findings contradict those of Bultena (1969) and Hoffman (1970).

In our sample more grandparents lived independently (either alone or with a spouse) than with others (i.e. friends, relatives, live-in sitter). Students' interactions with grandparents who lived independently tended to be more frequent than with those who shared a household with others. The differences were statistically significant for both paternal and maternal grandparents. Therefore, we accept the hypothesis.

When testing the relationship between age of grandparents and frequency of visits no statistically significant difference was found. Visitation patterns varied according to sex of grandparent and which set of grandparents was visited. Both paternal and maternal grandmothers were visited weekly or more frequently in the middle age group (66-75 years of age). However, the older the maternal grandfathers the more frequently they were visited while paternal grandfathers were visited at least weekly whether they were over 70 or under 65 we reject the hypothesis that the older the grandparent the more frequent the visits from the young adult grandchild.

Health status of the elderly, according to the literature, is another factor associated with interaction patterns. The students in our study were asked to indicate whether they perceived their grandparents' health as excellent, good, fair or poor. Slightly less than one-fourth of both paternal and maternal grandparents were reported to be in fair or poor health. There was a tendency toward more frequent visits to paternal grandparents in fair or poor health than to maternal grandparents with the same health status. Yet, differences in visiting patterns as related to health of grandparents were not statistically significant so the hypothesis is rejected.

The perceived quality of the relationship existing between the young adult and his grandparents was assessed through a series of concrete and attitudinal variables divided into actions of students toward grandparents and actions of grandparents toward student. These variables include students write and phone grandparents, remember grandparents on birthdays and other occasions, help them when they are perceived as lonely, gives them room in their own home if necessary, confide in them, go to them for advice, carry on a good conversation with them, perceived differences in values, perception of grandparents (i.e. grandparent perceived as a friend, respected elder, nuisance or combination of the three), enjoyment of visits to grandparents, grandparent writes or phones student, grandparent gives him presents, grandparent gives him moral or financial support, visits him at home or university, student enjoys grandparents' reminiscences. The findings reported at this point are preliminary. We have treated the variables which we perceive to indicate quality of relationship as separate variables. Our intention is to scale and/or score them and then test for their combined significance in the next phase of our study. Testing them as separate variables we found significance to differ with paternal and maternal grandparents, however, to facilitate discussion these variables will be considered as paternal and maternal units.

There proved to be a statistically significant difference between visits to paternal grandparents as related to whether the student writes or phones grandparents, confides in grandparents, perceives any value differences, enjoys visits to grandparents, and enjoys their reminiscences (refer to Table 1). The student visits his paternal grandparents more frequently when the more positive answer to the above responses is utilized. However, for those variables not statistically significant several interesting trends emerged. Students who remembered their grandparents on birthdays or other occasions visited them more frequently even when the grandparent did not write or phone the student or give him presents. Grandparents are viewed more as a friend than as a respected elder, someone to go to for advice and someone with whom the student can converse easily. Students also feel responsibility for paternal grandparents. They see it as their responsibility to help grandparents who are lonely and, if necessary, provide them with room in their own home. This tends to support Robertson's (1976) findings on the student's perception of the grandparent role, that of provider of family history and emotional support. Also, paternal grandparents were visited more frequently by students who viewed them as confidants and friends who shared common interests and attitudes rather than exhibited the more concrete behavior of gift giving. This leads us to assume that young adults visit paternal grandparents more frequently because of qualitative factors rather than ritualistic ones, especially since they enjoy being with them.

In contrast, the variables which proved to be significant for maternal grandparents were somewhat different than those for paternal grandparents; such as remembering grandparents on birthdays or other occasions, helping grandparents when lonely, being able to carry on a good conversation and enjoyment of grandparents' reminiscences (refer to Table 1). The students who write or phone grandparents and remember them on birthdays or other occasions visit more frequently even when grandparents do not reciprocate with the same type of behavior. Grandparents perceived by students as confidants with little or no differences in values were also visited at least weekly. However, the student sees his maternal grandparents more as a combination of friend and respected elder as well as a nuisance. Despite a lack of enjoyment in visits, a large proportion reported visits to grandparents on at least a weekly basis. Though not conclusively, this tends to support the view that maternal grandparents are visited more ritualistically than qualitatively or spontaneously. This appears to be the case regardless of location.

Conclusion

In summary, this preliminary phase of our study identified some factors which appear to be significant in the interaction patterns of young adults with their grandparents. Since kinship ties are reputedly stronger on the mother's side of the family, we dichotomized the interactions in relation to paternal and maternal grandparents.

Assuming that children follow the attitudinal and behavior patterns established by their parents, we used factors which according to the literature on intergenerational interaction, were associated with the frequency of visits of adult children to their aged parents. This was necessary because of the dearth of studies from the young adult grandchild's perspective. Many of the factors significant in the adult child/aged parent interactions, however, were not significant for young adult grandchildren. In contrast to other researchers, we did not find the relationship of sex, age or health to patterns of face-to-face interaction as being significant. Other factors which proved to be significant and non-significant differed with set of grandparents (i.e. maternal and paternal) such as the distance, and quality of relationship variables.

In agreement with the findings of other researchers our study indicated distance, rural-urban backgrounds, and living arrangements to be associated with the frequency of intergenerational interaction. Students from both rural and urban areas living within 30 miles of their grandparents visited them at least weekly, particularly when they lived independently (either alone or with a spouse). However, young adults in rural areas tended to visit grandparents more frequently regardless of distance, while students from urban areas visited those grandparents most frequently who lived within a two-hour drive. This fails to support the findings of other researchers that urban elderly interact with their families more frequently and live in closer proximity; on the contrary our sample shows the opposite. The role of the grandparent as perceived by the young adult grandchild in other studies (Robertson, 1976; Mead, 1977) was that of gift giver, conveyor of family history and someone to provide emotional support. Robertson (1976), however, did not find the grandparent to be a confidant, advisor or companion. On the one hand our study supports this view of grandparent role in regard to distribution of responses; on the other hand this changes when looking at frequency of interaction. Students tend to visit grandparents more frequently when they are perceived as being confidants, advisors, providers of emotional support and/or family history even when they did not give the students gifts. The grandparent was viewed not just as a respected elder but also a friend and someone who shared similar values. In other words, the young adult is more appreciative of a grandparent who does not interact on a predominantly concrete level but shares common interests and attitudes. This seems to be the pattern regardless of location.

Most grandchildren felt definite responsibilities toward their grandparents. This included helping them when they were lonely, writing or phoning them, remembering them on birthdays and special occasions and potentially providing them room in their own home. Young adult grandchildren appeared to visit their paternal grandparents more frequently when all of the factors were positive denoting these visits may be due more to genuine affection than duty. However, they tended to visit maternal grandparents frequently even when responses were negative and when they actually did not enjoy the visits. Thus, interaction with maternal grandparents may be due more to a feeling of duty or habit than actual affection. We can conclude that there is a difference in relationship between maternal and paternal grandparents which tends to support the evidence of closer kinship ties to the mother's side of the family than the father's. The evidence tends to support the view that the young adult visits his paternal grandparents on the basis of qualitative characteristics such as shared values, attitudes, interests, etc.; while maternal grandparents are visited more ritualistically based on early socialization practices, duty or a sense of responsibility in addition to the qualitative factors. This indicated that the young adults unlike their younger counterpart, although strongly influenced by earlier experiences, tend to decide what type of relationship they will have with their grandparents. However, we cannot state conclusively that young adults visit their maternal grandparents more ritualistically than qualitatively and paternal grandparents vice versa. There are other variables which may be involved (i.e. socioeconomic status of parents and grandparents, race, early childhood interaction patterns and the parents' relationship to the grandparents).

The further study of kin as a supportive network for the elderly seems to be not only justified but necessary, especially in view of the fact that community-supported services are not reaching all, or a large proportion of, those who are eligible for such services.

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Rural Sociology in the 1980's: Positivistic or Applied?

A paper prepared for presentation at
the annual meeting of the Southern Association of
Agricultural Scientists; Rural Sociology Section

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Wayne A. White
Kansas State University

Note: This paper is a tentative working copy and part of a larger ongoing project. Criticisms and suggestions will be appreciated.

Introduction

Historically, rural sociology was created as a discipline (or subdiscipline) by scholars who were critical of the directions and form that American sociology was taking at the time (Hawthorne, 1926; Sanderson, 1927; Taylor, 1940; Brunner, 1946; Duncan, 1954). More specifically, the pioneers in rural sociology rejected "ivory tower conceptualist" and "abstract grand theory" in favor of an "empirically based theory" (Picou et al., 1978: 567).

These early critiques and propositions were derived from concern for praxis. Rural sociologists began early and have continued to emphasize the importance of practical research which can produce knowledge applicable to the amelioration of rural social problems (Morgan, 1936; Taylor, 1937; Galpin, 1938; Lively, 1943; Sewell, 1956; Brunner, 1957; Ford, 1973; Capener, 1975).

This praxis oriented, critical aspect of early rural sociology, has much in common with contemporary radical-critical sociology. This affinity was explicitly recognized by Kaufman (1971: 398), in his statement, "Radical sociologists share with rural sociologists the belief that research is social problem oriented and that participation in problem solution is desirable."

Despite this seemingly important political and intellectual affinity between rural sociologists and persons with a radical-critical perspective,[1] the two groups have not been working together. Picou and his associates (1978: 565) recently found that only three of 156 theoretically codable articles published in Rural Sociology in the 1965-76 time period could be classified as falling within Mullin's (1973) "radical-critical" theory group. Rural sociological research has also been repeatedly criticized in recent years for not producing or utilizing knowledge that can have an impact upon social policy affecting rural (or any other) social problems (Copp, 1972; Hightower, 1973; Ford, 1973; Nolan et al., 1975).

Several factors contributing to the failure of contemporary rural sociology to have a more important impact upon policy decisions and action programs have been identified in recent literature. Some of those factors and the interpretation of them provided by the original authors are discussed below. The final section of the present paper provides a possible point of departure for rural sociologists (or other social scientists) interested in producing knowledge and taking actions that will enhance the quality of life in rural communities.

The Loss of Praxis

Nolan et al., (1975), utilized two separate criteria for evaluating the relevance of rural sociological research for social policy concerns: 1) the author(s)' explicitness in stating the possible application or policy relevance of his or her findings; and 2) the means used to select the research topic. It was concluded that the material reviewed (research published in Rural Sociology from 1966 to 1975) "failed miserably" regardless of which criterion was used (Nolan et al., 1975: 434). In other words, it was found that rural sociologists make few, if any, specific policy recommendations in the published literature. Nolan and his associates also proposed that research topics are chosen in an arbitrary manner, with research funding many times being the primary topic selection consideration. The later proposal has been supported by other researchers concerned with the rather close relationship between funded rural sociological researchers and USDA funding administrators (Taylor, 1940; Copp, 1972).

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[1] Hopefully it will become clear what is meant by "radical-critical perspective" in the discussion that follows. The reader desiring a more "precise" definition than provided here should consult Mullins (1973). The "radical" portion of that designation is somewhat redundant and has been dropped in the later portion of the present work.

The importance that the relationship between funding administrators and rural sociologists can have upon the selection of research topics has been illustrated by Harold Capener (1975). As the outgoing president of the Rural Sociological Society in 1975, Capener was in a position to recommend future directions for the discipline. He indicated that the recent reversal of the historic rural to urban trend in population migration would require substantial shifts in economic, social, and political policy. Capener saw this shift as an opportunity for rural sociologists to increase their impact upon rural policy.

Instead of discussing ways in which rural sociologists could improve the quality of their knowledge, or its relevance to policy issues, Capener (1975) chose to outline an "organizational plan" for the application of "scientific" knowledge. (What he meant by "scientific" was not discussed.) A key aspect of Capener's organizational plan concerned strategies for dealing with funding organizations that have traditionally had a bias against funding the social sciences. This funding bias was explained by Capener in terms of the predominant mind set of funding administrators. Since the individuals responsible for making funding decisions at USDA have been largely trained in the physical and biological sciences, they want to see "hard scientific evidence" before research is deemed legitimate and worthy of funding (Capener, 1975: 406).

Although Capener indicated that funding administrators could change their perceptions of social science research, the primary thrust of his strategy for increased application involved the adaptation of rural sociologists. By becoming more like the legitimate hard scientists in terms of organization and methodology, rural sociologists could increase their cut of research money.

When examining the same issue, Nolan et al., (1975) reached a conclusion quite different than Capener's (1975) call for accomodation to the bureaucratic requirements of funding agencies. They proposed that the failure of rural sociologists to follow through on their commitment to application is due to the lack of "a clear vision of what policy research ought to look like" (Nolan, et al., 1975: 446). The lack of clear vision arises, in the authors' perception, because of the gross indaequacy of the positivist conception of science that is so pervasive in rural sociology. Nolan, et al., offer critical theory as a perspective capable of overcoming many of the problems inherent in the positivistic world view that they perceive as the source of rural sociologists' failure to engage in policy relevant research.

A similar charge and prescription were offered by Picou and his associates (1978). On the basis of a content analysis of research published in Rural Sociology from 1965 to 1976 it was concluded that the field is "characterized by theoretical closure and methodological monism, suggesting a crisis of discipline stasis" (Picou, et al., 1978: 559).

The "theoretical closure" claim was based upon the findings that more than nine of ten (143 of 156) articles codable according to Ritzer's (1975) paradigm groups fit into the "social facts paradigm" and over three fourths (119 of 156) of those codable according to Mullin's (1973) theory groups were judged to fall into the "Standard American sociology" group (Picou, et al., 1978: 564-65). The authors were careful to point out that neither Ritzer's "social facts paradigm" nor Mullin's "Standard American sociology" are synonomous with what is commonly referred to as structural-functionalism. They do contend, however, that "theory in rural sociology has been guided historically by a variety of both old and new forms of...the structural-functional component of the social facts paradigm" (Picou, et al., 1978: 569).

The charge of "methodological monism" was based primarily upon the finding that over 90 percent of research examined relied upon sample survey questionnaires, census data, or interviews as the primary source of data (Picou, et al., 1970: 565-66). Perhaps an even more telling finding was that only three studies, out of the 143 that were considered codable in terms of method, were based upon actual "observation" of people (Picou, et al., 1978: 565).

One reason that Picou, et al., (1978) view a "crisis of discipline stasis" as emerging from "theoretical closure" and "methodological monism" is that the historical emphasis upon praxis within rural sociology is not being carried out by contemporary rural sociologists. They advocate the development of a "plurality of theoretical and methodological approaches" (Picou, et al., 1978: 578) as a means of revitalizing rural sociology. Like Nolan, et al., (1975), Picou (1978) and his associates identify critical theory as a logical and viable perspective for attempting to realize the historical promise of a praxis oriented rural sociology.

Praxis and Rural Sociology in the Future

The brief review of literature just provided identifies several issues and trends relevant to the development of a praxis oriented rural sociology: 1) the historical and continuing concern expressed for practical application of research among rural sociologists; 2) the critical stance toward mainstream American sociology taken by early rural sociologists; 3) a substantial degree of external control, over research topic selection and methodology, by funding agencies; 4) a widespread acceptance of a "positivistic" conception of science; 5) the failure of contemporary rural sociologists to engage in policy relevant research or action; 6) a nearly exclusive reliance upon a structural-functional theoretic position, with a concomitant reliance upon survey-research techniques; and finally, 7) the recent proposal to examine critical theory as a perspective that is compatible with an applied orientatio

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[2] Obviously, each of these points will require further ela documentation if any "skeptics" (see Bealer, 1978) are to accep "accurate." That project is in process.

Based upon the points just listed, I have developed a set of strategies that are intended to provide tentative guidance to rural sociologists interested in revitalizing the historical emphasis upon practical application in rural sociology.

First, a familiarity with the practical concerns and dissatisfaction with American sociology expressed by the early rural sociologists (Taylor, 1937; Galpin, 1938; Lively, 1943; Melvin, 1951; Sewell, 1956; Brunner, 1946, 1957; Ford, 1973; Sanderson, 1916, 1927; and others) would provide historical depth and possibly aid in avoiding some false starts. The account provided by Loomis and Loomis (1967) of the practical ramifications realized from the research of early rural sociologists is also relevant to this historical grounding.

One obvious way to avoid external control of research topic selection and methodology is to not seek funds from USDA or other funding agencies that often have rather specific _a priori_ requirements (Taylor, 1940; Copp, 1972; Nolan and Galliher, 1973). One group of sources that are worth examining are State Historical Societies and State Councils on the Humanities. By selecting more labor intensive rather than capital intensive research strategies the need for large research grants can be reduced. Observational studies in local communities require more time and dedication than money. An ethical commitment to continually question who a research project might benefit (Kolakowski, 1968) can serve as a general guide.

The widespread acceptance of a "positivist" conception of science among rural sociologists (Nolan, _et al_., 1975) and more generally among sociologists (Keat and Urry, 1975) and American social scientists (Matson, 1964) has been well documented. The adoption of a positivist conception of science by rural sociologists has served to lead the discipline away from an applied orientation. More specifically, the problematic aspect of this view is the belief that "scientific" rural sociology can and must be objective and ethically neutral. Such a position can be taken only if the history of the development of science is ignored (Kuhn, 1962; Matson, 1964). Yet, the sociologist James Coleman has proposed that "there are no social or humanitarian values in the disciplinary world; disciplinary values such as objectivity and the search for truth are separate from and do not recognize the world of action" (Nolan, _et al_., 1975: 44). Even if most rural sociologists do not accept the extreme value position of Coleman, an analysis of their research indicates sufficient agreement to lead to an avoidance of specific policy recommendations.

Picou _et al_., (1978) attrib [illegible] rural sociologists to engage in [illegible] "theoretical clo [illegible]

The idea that pragmatist philosophy may have something to contribute to the development of social theorizing is not totally new. The social behaviorism of George Herbert Mead and other early interactionist thinkers were profoundly influenced by and even contributed to the development of pragmatist philosophy (Mead, 1959; Natanson, 1956). In a somewhat different vein, C. Wright Mills (1966) provided an extensive discussion of the relation between philosophic pragmatism and American social institutions.

The relevance of philosophic pragmatism for developing a way of approaching social phenomena is enhanced by the fact that it is a modern school in philosophy. Pragmatism developed in the last one hundred years (Moore, 1961; Aune, 1970). This same period has provided a concomitant development in social theorizing and vast scientific "achievement". The significance of this co-development is that of a shared intellectual milieu and heritage. The influence that an intellectual and social time period can have upon the development of a world view has been clearly illustrated by Lewis Coser (1971).

The discussion of philosophic pragmatism that follows is intentionally selective. In line with the pragmatic mode of analysis, the elements included below have been selected to meet the purposes of the task at hand. That task is essentially to develop a world view, with specific epistemological elements, that may provide the foundation for the development of a more adequate approach to examine and understand rural social reality.

Some credit Charles Peirce (1839-1914) with originating pragmatism with the publication of an article in 1878 entitled "How to Make Our Ideas Clear" (Titus, 1970). After spending the majority of his younger years involved in various scientific enterprises, Peirce became disenchanted with what he perceived as the divorce of knowledge and action. He then turned his attention toward problems of logic and epistemology (Moore, 1961; Aune, 1970).

In order to understand the basic character of the world view developed by Peirce it is necessary to understand his position and proposed compromise on a controversy that has existed in philosophy since at least the medieval period. This controversy can be identified as the "problem of universals." A popular articulation of this problem has been provided by Moore (1961: 25):

> "The problem of universals is the problem of the correspondence of our intellectual concepts to things existing outside our intellect. The question....is to discover to what extent the concepts of the mind correspond to the things they represent; how the flower we conceive represents the flower existing in nature; in a word whether our ideas are faithful and have an objective reality."

[illegible]'s position on this problem is similar to the position generally [illegible] as moderate realism (Moore, 1961: 25-28). Specifically, Peirce [illegible] that the ultimate meaning of an idea or concept is directly related [illegible] observer's particular experiences. This position represents a compro- [illegible] between the assertion by the positivists that we can objectively know [illegible] reality through the senses and the proposition made by the intui- [illegible] that the nature of all perceptions is subjective (Titus, 1970; [illegible], 1961). Peirce elaborated his pragmatic epistemology on the foundation provided by his position on the problem of universals (Moore, 1961). Conceptions of reality are tentative and continually subject to change because of the investigator's continually changing experiences and position [illegible] relation to the reality he or she is examining. Following Peirce, then, the propositions that we make about social reality can not be considered mere reflections of what is "out there". The relationship of the investigator to the reality investigated influences perceptions as well as subsequent interpretations.

By combining Peirce's view of continually changing experiences with William James' conception of the nature of reality, a world view that seems to fit the nature of social phenomena emerges. James conceived of the world as being in a constant state of flux or change; and as pluralistic in nature rather than monistic or dualistic (Titus, 1970).

Another aspect of Peirce's philosophy that helps to illustrate the world view proposed here involves his acceptance of the idea of fallibilism. "Fallibilism" is the explicit recognition that even the most intelligent men and women are subject to mistakes and that constant modification is an inherent part of progressive inquiry. This attitude is partly due to the recognition that "there is chance (tychism) in nature and at times a spontaneous departure from that which men take to be law" (Titus, 1970: 260).

John Dewey reinforced and further elaborated the positions held by Peirce and James on the tentative nature of knowledge (Moore, 1961; Titus, 1970). Dewey viewed the world that we live in as an unfinished one. This aspect of Dewey's thought has been labeled "instrumentalism" (Aune, 1970; Moore, 1961; Titus, 1970). Instrumentalism combines the notions of temporalism, futurism, and meliorism. Temporalism is the idea that humans do not hold a merely spectator view of reality; knowledge not only reflects the world, but also changes and reshapes it. The notion of futurism emphasizes preparing for the future, which will never repeat the past and is in some sense always novel. Meliorism represents the idea that human action can have an impact upon and improve the world (Titus, 1970).

The aspects selected for this discussion can be viewed as part of the "do not block the road to inquiry" doctrine of pragmatist philosophy (Moore, 1961: 267). This doctrine consists of scattered passages concerned with avoiding the blockages to obtaining knowledge which result from "dogmatic absolutism" on the one hand and "scepticism that asserts that knowledge is impossible" on the other (Moore, 1961: 267). In the process of attempting to overcome these specific obstacles to obtaining knowledge, the pragmatists have (inadvertently) provided a world view with specific epistemological and ontological elements that are both consistent with and serve to clarify the assumptions of critical theory.

The compatability of the pluralistic epistemology developed by the pragmatists with that of the critical theorists is illustrated in the following characterization of Habermas' perspective as "a kind of epistemological pluralism which denies validity to any monistic theory of knowledge, whether positivist, idealist, phenomenological, or whatever" (Jay, 1973: 31). The advantage that pragmatist philosophy holds for American rural sociologists who care to understand epistemological issues and develop an epistemological and ontological foundation for a practical orientation to research, is one of availability and intelligibility. The rather obscure and ponderous writing of the Frankfurt School scholars, the founding fathers of contemporary critical theory (Jay, 1973), is probably less accessible and understandable for most contemporary Americans.

The importance of undertaking the laborious task of developing an informed philosophical foundation for rural (or other) sociological theory and research was cogently expressed by Horkheimer in his contrast of "Traditional and Critical Theory" (Quoted by Jay, 1973: 34):

> To a traditional theorist, knowledge is the reproduction of society; to a critical theorist, it is a means to transform it ...to a traditional theorist, sociology can be established as an autonomous science, freed from its origins in history and philosophy, whereas to a critical theorist, this separation is both artificial and undesirable. Finally, the traditional theorist may attempt to separate facts and values, but a critical theorist knows that such a separation is chimerical, and moreover serves to thwart the *praxis* necessary to change the status quo.

If rural sociology as a discipline is to realize in the future the promise of praxis in its past, some fundamental shifts in direction are called for. A critical self awareness and explicit acknowledgement of the epistemological and ontological assumptions made when undertaking empirical research can help to avoid the trap of asceptic scientism that has emerged during the reign of positivism in recent years. I believe that such an awareness will lead rural sociologists away from the nearly pervasive reliance upon structural functional analysis and survey-research techniques that now characterize the discipline. The components of pragmatist philosophy offered here can serve as a tentative guide for the development of a praxis oriented perspective for rural sociologists and others.

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THE CRITERIA DILEMMA AND EVALUATING EXTENSION PROGRAMS*

By

C. L. Taylor and W. R. Summerhill
Institute of Food and Agricultural Sciences
University of Florida

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Introduction

We busy ourselves about evaluating Extension programs as a carpenter would gather his tools to build a house, and then realize we have no measuring sticks. Generally, we find ourselves describing what has happened rather than comparing results with a well-defined criterion. It seems to us that part of the dilemma is inherent in some of the definitions of a criterion. Steele1/ points out that a criterion is "a measure against which something can be judged. It may be a rule, a standard, a norm, an object of condition or behavior which is considered to be 'good' or 'ideal.' It is a description or image of what a valuable (suitable, high quality, effective, important, and/or efficient) program is like." Boyle2/ defines a criterion as "what should be." Some of the wording used to describe a criterion, such as, "good," "suitable," "what should be," and "high quality" are value laden and have different meanings to different people. There is no problem agreeing that these words describe what we would like our programs to be. However, there are serious problems in agreeing on what is a good or high quality program in home economics or "what should be" the cost per contact hour of instruction in a 4-H EFNEP. In County Program Reviews in Florida one criterion often used is, "the educational program should be comprehensive." The difficulty arises in agreeing on the minimum level of "comprehensive."

Selection and development of criteria, it seems to us, is one of the big areas of frustration for Extension people, especially as they develop behavioral objectives that are measureable in educational programs. The literature3/ provides at least three approaches for developing criteria: (1) Armchair approach--in this case the evaluator selects criteria off-the-top of his head. This may occur with little forethought. (2) Empirical approach--in this case the Extension worker would rely on research finds to assist in selection and development of criteria. (3) The rational approach--makes a systematic analysis of the situation and arrives at the selection or development of the criterion based on the information available. Some combination of the rational and empirical approaches is highly recommended for Extension faculty. The dilemma we find ourselves in is lack of time to make an exhaustive analysis of the literature or problem situation, and, in some cases, lack of a body of knowledge to draw from to arrive at a rational criterion.

We do not take the position that because we find ourselves in a dilemma there is no hope or that all is lost. We agree with Scriven's4/ philosophy that even though the existing methods of setting standards is quite arbitrary in many cases, something is better than nothing. That is, the injustice and ineptitude resulting from an absence of standards is worse than the consequences of adopting arbitrary ones. In light of this we offer a suggestion for improving the rational approach for the selection of behavioral objectives that are used to guide the educational content built into Extension programs of work. Mager5/ indicates that when objectives are stated in behavioral terms with a high degree of specificity and accompanied by minimal levels of performance, they become criteria. Many Extension plans of work describe behavioral objectives without performance parameters. Some appear to be idealistic, others appear totally unrealistic.

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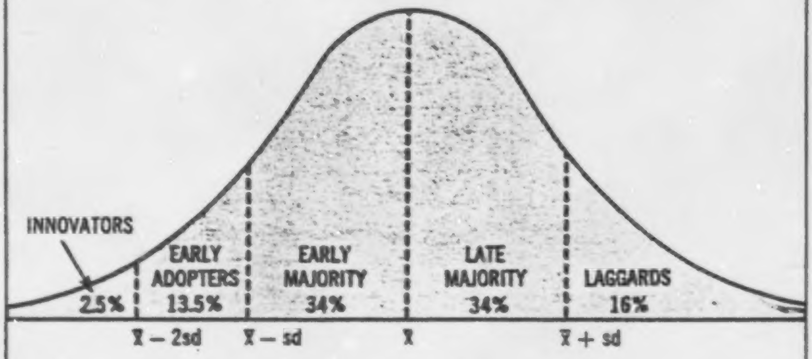
We feel that adoption theory offers some insight into the area of developing or selecting behavioral objectives. The adoptor categories6/ in Figure 1 suggest there is a difference in the amount of time required for different people to adopt practices. By observing the model one would immediately have some feeling about the rate of adoption of a given practice. This model thus becomes one reference point to help rationally establish minimum levels of performance in the behavioral objective.

Figure 1

Adopter categorization on the basis of innovativeness.



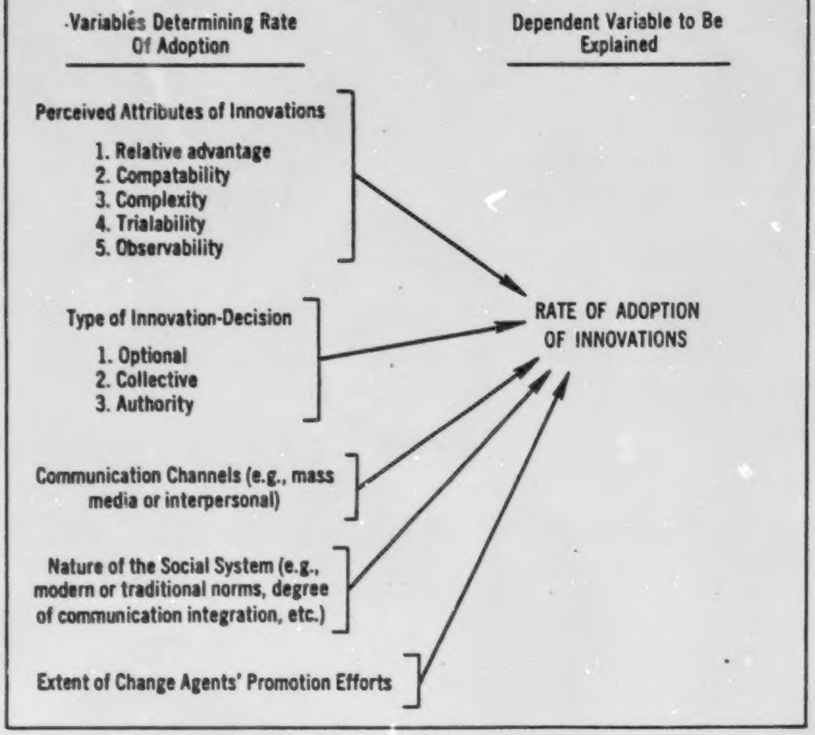
The innovativeness dimension, as measured by the time at which an individual adopts an innovation or innovations, is continuous. However, this variable may be partitioned into five adopter categories by laying off standard deviations from the average time of adoption.

Another reference point from adoption theory lies in the stages of the adoption process. The literature7/ indicates that a person moves through five stages to adopt a new behavior. They are: awareness, interest, evaluation, trial, and adoption. By understanding the stage(s) of adoption of a client group the Extension worker has a clearer notion about stating the minimum level of performance in an objective.

A third reference point grounded in adoption theory is the variables that determine the rate of adoption of innovations. Figure 2 is a paradigm reflecting some of these variables.8/ For example, innovations that have a significant economic advantage over the old practice are adopted relatively quickly. Knowing the relative economic advantage of an innovation would give the Extension agent some insight concerning selection or development of behavioral objectives.

Figure 2

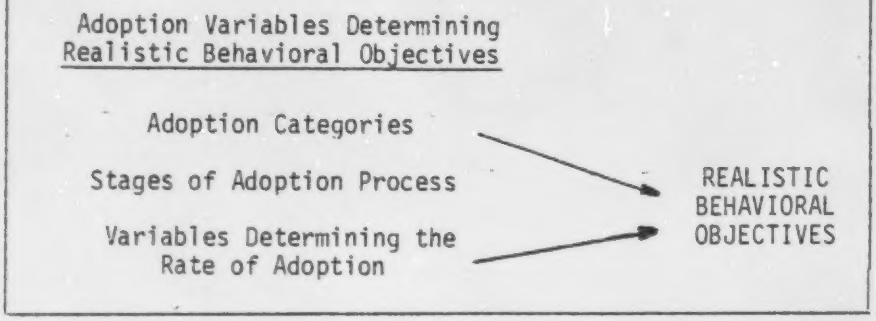
A paradigm of variables determining the rate of adoption of innovations.


Variables Determining Rate Of Adoption
Dependent Variable to Be Explained
Perceived Attributes of Innovations
1. Relative advantage
2. Compatability
3. Complexity
4. Trialability
5. Observability
Type of Innovation-Decision
1. Optional
2. Collective
3. Authority
Communication Channels (e.g., mass media or interpersonal)
Nature of the Social System (e.g., modern or traditional norms, degree of communication integration, etc.)
Extent of Change Agents' Promotion Efforts
RATE OF ADOPTION OF INNOVATIONS

We propose the following paradigm to aid in the rational approach to selecting or developing realistic behavioral objectives for Extension programming.

Figure 3

A paradigm of adoption variables determining the realistic development of behavioral objectives


Adoption Variables Determining Realistic Behavioral Objectives
Adoption Categories
Stages of Adoption Process
Variables Determining the Rate of Adoption
REALISTIC BEHAVIORAL OBJECTIVES

Extension has traditionally used the behavioral objectives as one guide for program evaluation. Consequently, we feel the area of adoption theory offers potential for strengthening the criterion function of the behavioral objective thereby helping to resolve the criteria dilemma in evaluating Extension programs.

Footnotes

1. Sara Steele, "Developing a Concept of Program Evaluation" (paper, University of Wisconsin), pp. 15-20.

2. P. Boyle, "Evaluating Extension Programs" (paper, Department of Agricultural and Extension Education, University of Wisconsin).

3. David G. Ryans, "Notes on the Criterion Problem in Research," Journal of Genetic Psychology XCI (September 1957).

4. Gene V. Glass, "Standards and Criteria," Journal of Educational Measurement (15:4), 1978: 237-261.

5. Ibid.

6. R. F. Moger, Preparing Instructional Objectives (Palo Alto: Fearou Publishers, 1962), pp. 44-50.

7. Everett M. Rogers and F. Floyd Shoemaker, Communication of Innovations, A Cross-Cultural Approach (New York: Free Press, 1971).

8. Ibid., p. 100.

9. Ibid., p. 158.

proportion in tax dollars and revenues to the financial health of
y. The downtown has a substantial amount of capital (streets,
gs, sewer and water lines, etc.) invested in it by both public and
sectors. The CBD also has many older buildings which are impor-
r historical and architectural reasons.

vitalization efforts are now underway in many cities and towns as
smen, government officials, and citizens work together to save
n. Successful downtown improvement programs are accomplished
a defined planning program. A primary step in the planning pro-
the involvement of the public. This is especially important in
n improvement projects where success is dependent on meeting the
nd desires of local citizens and shoppers.

typical downtown improvement planning program consists of several
The following is one approach.

ep 1: Initial Preparation
ep 2: Organizational Meetings
ep 3: Goal Setting
p 4: Studies and Surveys
p 5: Formulate Objectives
p 6: Concept Plans Development and Implementation[3]

s paper will concern itself with Step 3, especially that part of
ved with determining community and shoppers attitudes toward down-
rovement projects.

process of goal setting is the foundation on which a planning
is built. The establishment of goals is based on the desires and
of the target audience. In a downtown improvement program two
surveys are usually conducted to obtain this information. These
ers surveys and merchant surveys. While each type of survey is
in of itself, both are needed to gain the necessary understand-
at need to be accomplished in downtown. Much work has been done
siness community to develop survey materials for downtown mer-
Merchant surveys are used to obtain an understanding of their
the strengths and weaknesses of downtown. Their experience can
nsights into downtown problems and shopper habits and attitudes.
can also be used to get their feelings about improvement pro-

town improvement projects which are based solely on the opinions
nts do not present the total picture of downtown problems. Sur-
ts from merchants and government officials may indicate a need
r parking, traffic circulation and space requirements. If a sur-
ken of citizens and shoppers the results may be longer store
new department store, and a more attractive atmosphere.

is imperative for an effective downtown improvement program that
and shoppers be consulted as to what they feel need to be done.
oup's opinions are essential for support and success of the revi-
ion project.

nuel Berk, in his book Downtown Improvement Manual has listed
sentials for a shopper's survey:

Trade area information - Surveys can sample residents in dif-
ctions of the surrounding retail trade area and for each section

---

e D. Meeks, A Checklist for Evaluating Your Downtown, University
, College of Business Administration.

tell: where its residents shop for certain goods and services, how often, and why. It can also explain how shopping habits vary according to the ages of customers and size of families.

(2) What it will take to bring more people downtown - Surveys of people both inside the CBD and at other locations (such as their homes and other shopping centers) can be structured to determine those improvements or changes which can be expected to draw additional customer traffic.

(3) Opinions about the services and facilities in the CBD - Respondents can provide information on their attitudes toward various aspects of the Central Business District.[4]

The direct beneficiaries of the shoppers survey will be those involved in the revitalization effort. This group is usually composed of local government officials, merchants, planners, and concerned citizens. The results of the survey will be used as recommendations in the preparation of a comprehensive list of improvement objectives for the Central Business District.

Purpose of Research

This paper is based on research from a community retail study prepared for a small town in South Carolina. Johnsonville, with a population of approximately 1400 people, is located in a rural area of the low country of South Carolina. Concerned about the Central Business District in their town, the Mayor and Council of Johnsonville wanted to encourage existing businesses to remain downtown and new ones to locate there. They wondered why existing businesses leave, what types of new businesses were desired, and what did citizens think about shopping in Johnsonville. They also needed some hard facts to present to potential businesses about the economic situation in Johnsonville, and some information to show existing businesses where their advantages were and how to capitalize upon them. The town officials contacted the Clemson University Cooperative Extension Service and the Department of Agricultural Economics and Rural Sociology to assist with the study. A team of Extension and Research specialists, working with local citizens, developed a survey form and interviewed 117 town residents.

As stated in the final research report, "It must be emphasized that the purpose of this research is not to judge Johnsonville retail businesses and services in general, nor to judge particular businesses or services. The objective of this research is to obtain and report information that may aid community devleopment efforts in Johnsonville. The research results reported here can contribute to a comprehensive community development program."[5]

The following sections of this paper will describe the methods of research, the findings and results of the research, and report on any problems encountered from the project. This analysis will then be used to make changes in the current Johnsonville survey model.

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[4] Emanuel Berk, Downtown Improvement Manual, The ASPO Press, Chicago, 1976, p. 8-1.

[5] Ernest J. Bowen et. al., Research Results - Johnsonville Community Retail Study, Clemson University, Agricultural Experiment Station, Research Report, October 1979.

Method of Research

This research was designed to meet the needs of a small community desiring information for planning purposes in a limited amount of time and with limited financial resources. After consulting reference sources (Berk 1976 and Bramblett 1975), a questionnaire was prepared (see appendix) and was administered through telephone interviews. This interview method was selected for convenience, lack of trained interviewers, and limited time availability. The residential telephone numbers were selected by the random sequence method, from the current Johnsonville Telephone Directory. A total of 117 respondents provided information for this survey. There were four refusals by those contacted. Respondents were initially explained the purpose of the interview and then asked a series of questions about their shopping preferences and attitudes.

Research Results

The respondents were asked about the percentage of their shopping in Johnsonville. Some respondents preferred to indicate a general proportion rather than an actual percentage. The most frequent percentage (of shopping in Johnsonville) was 50 percent, although the responses ranged from three to ninety-three percent. The average proportion of shopping in Johnsonville (49 respondents) is 43 percent. Regarding general proportions, respondents were likely to indicate "very little," "some," "most."

Respondents were asked where they shopped for 18 separate items or type of store. More than 50 percent of the respondents indicated "Johnsonville only" for groceries, pharmacy and health, hardware, banking, and auto supplies.

More than 50 percent of the respondents indicated "elsewhere only" for the following items: five and ten, restaurants, mens clothing, ladies clothing, and shoes. At least one-third of the respondents indicated "both" (Johnsonville and elsewhere) for shopping at department stores and gift stores. Respondents could list shopping items in addition to the 18 stated by the interviewers. Stores or merchandise listed by respondents include florist, piece goods, and craft stores.

Then asked why they shopped in Johnsonville the most frequent reason is "convenience and/or close to home," followed by "I support the community and/or merchants" and "the merchant and clerks are friendly/good service." There were 154 responses to this question.

The most frequent reason for shopping elsewhere is "the selection or variety is better elsewhere," followed by "prices are lower elsewhere" and "some items are not available locally."

The 117 respondents from the Johnsonville community were asked what additional type of store or merchandise they would suggest for Johnsonville. There were a total of 201 responses to this question. Most frequently listed were five and ten, department store, restaurant, and grocery or supermarket.

Summary and Recommendations

Based on these research results, several general recommendations could be made to help Johnsonville build on current resources and strengths. Since many people shop in Johnsonville because of convenience, Johnsonville merchants (and the community) should strive to maintain and improve convenience for shoppers. The hours that stores are open could be extended, parking facilities expanded, and ease of getting in and out of stores improved. People also shop in Johnsonville because of friendliness of the employees of businesses. Merchants may wish to build on this strength through formal and informal training of employees. Perhaps a program to assure continuation of efficient and friendly commercial services in Johnsonville should be initiated. People of the Johnsonville area appear to feel strongly about supporting the community and its' economic base. Community solidarity is a vital strength indicated by this study.

The research results of the Johnsonville Community Retail Study has provided information that will prove useful not only to the government officials of Johnsonville but also to businesses. Businesses currently located in Johnsonville now have valuable information that will help them expand and improve services they now offer to the community. New businesses considering locating in the area will also find these research findings highly informative for planning and decision making.

Besides the information provided by this study, several other factors were presented for consideration by the community.

Population numbers and trends of the Johnsonville area should be considered. The community must have a sufficient number of people to support a mix of retail businesses and services. It is important to determine if the population in the Johnsonville area should be reviewed. The age distribution of the people in the shopping area determines, to a great extent, the type of merchandise purchased.

Day-to-day mobility of the population is a critical determinant of shopping patterns. People living in the community may continue to drive to Johnsonville; others, irregardless of residence may wish to drive elsewhere. The availability and price of gasoline will also affect mobility.

The most significant set of factors are those concerned with income and economic well-being of the people of the Johnsonville area. Current economic conditions are important but the future is most critical. Future economic development must be determined.

Future Research

In proposing the Johnsonville Retail Survey as a model for similar research in other communities, it should be understood that adaptations would likely need to be made. The Johnsonville study was done on short notice and due to the survey method (telephone), was necessarily concise. This model should be modified according to informational needs, the time framework of the research, the sample size, and the particular geo-demographic areas to be studies.

The Johnsonville model proved to be effective in obtaining information useful to the downtown improvement project. However, due to the limited time framework in which the Johnsonville research was conducted, valuable socio-economic characteristics of the respondents were omitted. In proposing a new survey model to be utilized by other communities involved in downtown improvement projects, it is imperative that socio-economic information be obtained. Of primary importance is sex, age, occupation, length of time a resident of the town, income, and education level.

The utilization of well trained interviewers is an essential element of scientific survey methodology. This becomes especially important when the survey may contain potentially sensitive socio-economic questions. Qualified interviewers will be much more likely to obtain reliable data and therefore are indispensable to the research process. One major weakness in the Johnsonville study was the need for additional interviewers. Only two actually conducted the interviews.

The interview method which was used in the study, telephone, proved to be effective in obtaining information. It is recommended though, that future studies of this type also utilize downtown on-the-street interviews to obtain information, as well as interviewing shoppers at other centers to determine their attitudes about shopping downtown.

Finally, several additional questions need to be added to the model to obtain more specific information on problems and needs. These questions would cover the following areas:

I. Consumer Convenience Factor -
  - store operating hours
  - traffic
  - parking
  - arrangement of stores

II. Merchandising -
  - merchandise
  - target market
  - displays
  - store layout and lighting
  - salesmanship
  - advertising

III. Physical Appearance -
  - building condition
  - sidewalks
  - streets
  - surroundings

Conclusion

The Johnsonville model, with the addition of the socio-economic and attitude questions discussed above, meets the three requirements set forth by Berk for an effective shopper's survey. With minor changes to meet the needs and characteristics of a particular community, the model should prove to be a useful instrument for other downtown improvement programs.

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Emanuel Berk, Downtown Improvement Manual, Chicago: The ASPO Press, 1976.

Ernest J. Bowen, et. al., Research Results - Johnsonville Community Retail Study, Research Report, Department of Agricultural Economics and Rural Sociology, Clemson University, October 1979.

Appendix I - Johnsonville Retail Survey

1. Approximately what percentage of your shopping is done in Johnsonville?

    ____

    (Note to interviewer: for question 2, simply check the blank if respondent purchases the respective item in Johnsonville and/or elsewhere.)

2. Now I will state items which you may purchase in Johnsonville or outside of Johnsonville. For each item please tell me whether or not you shop for that item in Johnsonville only; elsewhere only; both Johnsonville and elsewhere; or if you don't purchase that item at all.

Item	Johnsonville	Elsewhere
Groceries		
Pharmacy and Health		
Five and Ten		
Hardware		
Appliance, Radio, TV		
Bank		
Gasoline		
Auto Supplies		
Auto Repair		
Restaurant		
Furniture		
Department Store		
Gift Store		
Clothing, Mens		
Clothing, Ladies		
Clothing, Childrens		
Shoes		
Office Supplies		
Other		

(Note: if the respondent doesn't shop in Johnsonville, go to question 4.)

3. You have stated certain items that you purchase in Johnsonville. Please tell me why you shop in Johnsonville for these items. (read the items from question 2)

    ____

    ____

    (Note: if the respondent doesn't shop elsewhere, go to question 5.)

4. You have stated certain items that you purchase outside of Johnsonville. Please tell me why you shop elsewhere for these items. (read the items from question 2)

    ____

    ____

5. Which additional retail services or businesses should Johnsonville have?

______________ ______________ ______________

______________ ______________ ______________

6. Respondent Comments:

____

____

____

ATTITUDES TOWARD BORROWING AND OPINIONS OF CREDIT POLICIES AND PRACTICES OF LENDING INSTITUTIONS BY LIMITED RESOURCE FARMERS

by

Alfred L. Parks, Thaddeus McDonald and Bobby J. Mixon*

INTRODUCTION

A quick review of some USDA Statistical Publications {9, 10, 11, 12} will reveal some rather interesting, if not startling, information about the structural changes in the U.S. farm sector. Of particular interest is perhaps the rate at which farm numbers continues to decline. Also of special interest is the rate at which farmers continue to use borrowed funds to finance their farming operations. The number of farms continued to decline during the decade of the 70's at an annual rate of about 1.2 percent. At the same time the use of borrowed funds continued to increase at an annual rate of approximately 11 percent {6}.

There is widespread concern about the structural adjustments taking place in U.S. Agriculture. As farm numbers continue to decline, there is considerable concern about the impact that this is having on rural communities. A special segment of the rural population, known as the limited resource farmers, is perhaps hardest hit by these structural adjustments. For purposes of this paper, the limited resource farmer is defined as a farmer whose gross farm earnings do not exceed $20,000 on an Annual basis. In many parts of the country, and in southeast and south-central Texas in particular, the limited resource farmer represents upwards of 70 percent of total farm population.

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*Associate Professor, Research Specialist and Assistant Professor, respectively, Department of Agricultural Economics and Rural Sociology, Prairie View A&M University, Prairie View, Texas.

Until recent years, little or no attention was given to limited resource farmers. They were, for all practical purposes, ignored or overlooked. However, in the last few years there has been a resurgence of concern about the plight of the limited resource farmer. As various interest groups have begun to pay attention to the limited resource farmer many questions have surfaced concerning their conditions and future prospects for survival. Some of the questions generally raised are: What is a limited resource farmer? Of What significance is the limited resource farmer? Should we concern ourselves with the limited resource farmer? Will he survive? The list could go on and on.

Numerous programs of various intentions have been started and lots of money has been spent in the last few years to supposedly help the limited resource farmer. However, many of these programs were started without any definitive knowledge or understanding of the conditions and general behavior characteristics of the limited resource farmer. As a result, many of these programs have failed or have been ineffective.

A rather obvious aspect of the U.S. agricultural sector is that the limited resource farmer has not kept pace in the ever increasing capital using agriculture. Over the past few decades, farmers have continued to use more and more debt to finance their farming operations. There are indications, however, that this has not been the case among limited resource farmers. Previous research findings at Prairie View A&M University indicated that limited resource farmers have very low incidences of the uses of borrowed funds {3}. This situation is not unique to Texas. However, it does raise some interesting attitudinal questions which is the basis of this paper.

OBJECTIVE

The objective of this paper is to evaluate the attitudes of the limited resource farmer towards using borrowed funds from commercial and governmental lending institutions to finance their operations. This paper is part of a much larger study that was designed to analyze the financing practices of limited resource farmers as a means of identifying and determining the extent and significance of various factors impacting on farm organization and operation.

MEASUREMENT OF ATTITUDE

The literature on attitude measurement is fairly extensive {see e.g. 8}. Various techniques have been used to measure attitude in different contexts. Taking from this observation, it seems rather apparent that there is no general consensus as to what method of analysis to use. Therefore, the task as to the proper method to use is often quite difficult. This study uses factor analysis as the theoretical statistical model to measure attitude. Factor analysis in attitude measurement is not new. Triandis (1967) was one of the first to use factor analysis to measure behavior components of social attitudes. Bales and Couch (1969) used factor analysis in their sociological study of value statements. Armor and Couch (1972) used factor analysis in assessing attitudes towards the Vietnam War. Rojeck, et al (1975) applied factor analysis of intercorrelations to measure community satisfaction with four components of community services - medical, public, commercial and education.

Chen (1978) used factor analysis in his study on the quality of life in two counties in Western North Carolina. The statistical factor analytical method was applied to 488 questionnaires, using SP55 computer package from the information on the questionnaire, ten final common factors of significance responsible for the difference in the responses to the questions in the study area were extracted. Thirty four variables were closely associated with the final ten factors which were used to construct a quality of life index for two counties in Western North Carolina.

ANALYTICAL MODEL OF THIS RESEARCH

One of the fundamental tasks that confronts a researcher in attempting to analyze a set of observed data is the formulation of the theoretical statistical model {5}. The task is not always easy, since there are usually several models that can be used depending on the purpose of the analysis. The theoretical statistical model used in this research involves the use of the factor analysis.

The objective of factor analysis is to represent a variable Z_j in terms of several underlying factors. The basic factor analysis model used in this study is specified as follows:

$$Z_j = a_{j1}F_1 + a_{j2}F_2 + \dots + a_{jm}F_m + d_jU_j \quad (j = 1, 2, \dots, n),$$

where each of the n observed variables is described linearly in terms of m common factors and a unique factor. The common factors account for the correlations among the variables, while each unique factor accounts for the remaining variance of that variable. The coefficients of the factors are frequently referred to as "loadings".

The model may be further written explicitly for the value of variable j for individual i as follows:

$$Z_{ji} = \sum_{p=1}^{m} a_{jp}F_{pi} + d_jU_{ji} \quad (i = 1, 2, \dots, N; j = 1, 2, \dots, n).$$

CONSUMERS

MEASURING CITIZEN AND SHOPPER PREFERENCES AND ATTITUDES FOR DOWNTOWN IMPROVEMENT PROJECTS, Robert S. Pomeroy and Ernest J. Bowen, Clemson University.

ATTITUDES TOWARD BORROWING AND OPINIONS OF CREDIT POLICIES AND PRACTICES OF LENDING INSTITUTIONS BY LIMITED RESOURCE FARMERS, Alfred L. Parks, Thaddues McDonald and Bobby J. Mixon, Prairie View A & M University.

Robert S. Pomeroy, Extension Specialist; Instructor
Ernest J. Bowen, Graduate Assistant

Department of Agricultural Economics and Rural Sociology
Clemson University

Central Business District

Historically the Central Business District (CBD) has served as the
de, culture, and service center of cities and towns. Residents of the
n and surrounding area were drawn to the CBD to do their marketing, to

In this expression F_{pi} is the value of a common factor P for an individual i, and each of the m terms $a_{jp}F_{pi}$ represents the contribution of the corresponding factor to the linear composite, while d_jU_{ji} is the "residual error" in the theoretical representation of the observed measurement Z_{ji}.

The communality of a variable Z_j is given by the sum of squares of the common-factor coefficients, i.e.:

$$h^2_j = a^2_{j1} + a^2_{j2} + \ldots + a^2_{jm} \quad (j = 1, 2, \ldots, n).$$

The factor analysis model may be expended as follows:

$$\begin{array}{l} Z = a_{11}F_1 + a_{12}F_2 + \ldots + a_{1m}F_m + d_1U_1 \\ Z = a_{21}F_1 + a_{22}F_2 + \ldots + a_{2m}F_m \qquad + d_2U_2 \\ \;.\quad\;.\quad\;.\quad\;.\quad\;.\,.\,.\,.\quad\;.\qquad\;.\;\;. \\ Z = a_{n1}F_1 + a_{n2}F_2 + \ldots + a_{nm}F_m \qquad\qquad + d_nU_n \end{array}$$

This set of equations is called the factor pattern.

FINDINGS

The results of the theoretical statistical factor analysis technique is presented in this section. The analysis was used to measure the attitudes of [illegible] limited resource farmers in 10 Southeast Texas counties toward borrowing from lending institutions. This study was also designed to measure their opinions of credit policies and practices of these same institutions. A set of 34 agree-disagree items were tested (see Appendix). Each respondent was asked to respond to each statement by providing an answer ranging from strongly agree (value = 5) to strongly disagree (value = 1). These items were subjected to the factor analytical technique and as a result, a set of "factors" were identified.

The factor analysis procedure is the application of a set of product-moment correlations. In the initial stages of factor analysis it is instructive to begin with a correlation matrix. A correlation matrix showing

TABLE I. CORRELATION MATRIX

	RQ1	RQ2	RQ3	RQ4	RQ5	RQ6	RQ7	RQ8	RQ9	RQ10
RQ1	1.0000	0.0752	0.2667	0.0200	0.1378	0.0957	0.0086	0.0591	0.0174	0.0877
RQ2		1.0000	0.7017	0.3980	0.4231	0.0089	0.3606	0.1619	-0.2989	0.4144
RQ3			1.0000	0.5511	0.4751	0.0479	0.4990	0.2733	-0.2805	0.4069
RQ4				1.0000	0.4967	-0.0065	0.2779	0.4343	-0.2428	0.2799
RQ5					1.0000	0.1064	0.2563	0.3967	-0.3340	0.4408
RQ6						1.0000	-0.1582	-0.0375	0.0744	-0.1577
RQ7							1.0000	0.3268	-0.2434	0.2038
RQ8								1.0000	-0.1976	-0.0359
RQ9									1.0000	-0.3196
RQ10										1.0000

the intercorrelations among ten of the attitude variables is shown in Table I. Upon inspection of this table we notice substantial correlations among some of the variables. For instance, there is a substantial correlation between RQ2 and RQ3 (r = .70) and between RQ3 and RQ4 (r = .55). The original 34 x 34 matrix was reduced to a 10 x 10 matrix by use of the significance variable method explained in Table IV. We also note that there are very low and negative correlations between some of these variables. Variable 1 and variable 7 have a very low positive correlation (r = .0086) whereas, variable 4 and variable 6 have a very low negative correlation. From this inspection we might conclude two distinct patterns, or "clusters", of correlations. In the first instance we might say that the attitude is one of general belief that institutions are biased against limited resource farmers and in the second instance that they believe they cannot borrow enough to do much good.

A number of "factors" can be extracted from the matrix by inspection. However, as the size of the matrix increases and the number of intercorrelations becomes larger, it becomes increasingly more difficult to extract factor patterns using this technique. Factor analysis which uses mathematical techniques can be applied to much larger matrices whereas the visual inspection method would be inappropriate.

In the factor analysis procedure, there are two basic steps. Step one is the extraction of the "unrotated" factors, sometimes called factor "loadings". It was found through the factor analysis procedure that a matrix of ten factors explained the majority of the results (see Table II). In Table II the factor loadings are presented for the unrotated matrix. Only those factor loadings with absolute values of 0.4 or above are included. Since factors with values of 0.4 or above essentially defines the content of the factor, other values were not included.

The second step in factor analysis is the rotation of the factor loadings. The objective of factor rotation is to improve on the interpretation of factor loadings. A factor loading is essentially the same thing as a correlation. That is, it expresses the relationship between a variable and a factor. By inspection of a factor loading one can interpret the meaning of the factor in terms of its meanings with respect to the particular variable. The rotated factor matrix was extracted by means of the varimax method. The loadings of the varimax rotated factor matrix are different from the loadings of the unrotated matrix. In Table II the pattern of clustering of variables are heavily on factor 1. In Table III the clusters are more dispersed and spread over all ten factors.

The estimated communality of the variable set was calculated and are listed in Table IV. A communality represents the sum of squares of the loadings for each variable. The range in value is from 0 - 1. The higher the value, the higher the contribution to total variation. For example, variable 3 has a communality of .79 suggesting a high correlation with other variables comprising the factors. In other words, this variable contributes 79 percent of the total variation.

In column four of Table IV the eigenvalues of the factors are presented. The eigenvalue measures the proportion of total variation attributable to the common factor, which is the sum of the squares of factor loadings. The eigenvalue is useful in deciding on the number of factors. Eigenvalues less than one are usually not interpreted since they account for no more than the variance of a single variable. In our case, all variables beyond ten had eigenvalues less than one.

Column five presents the percent of variation associated with each extracted factor. Factor one accounts for approximately 26 percent of total variation. The commulated percent of variation is presented in column six.

TABLE II. UNROTATED FACTOR PATTERN OF TEN FACTORS

Variable	Factor 1	2	3	4	5	6	7	8	9	10
RQ1										
RQ2	.640									
RQ3	.716									
RQ4	.604									
RQ5	.623									
RQ6										
RQ7	.408		.441							
RQ8									.418	
RQ9	.429									
RQ10	.518				.492					
RQ11	.612									.409
RQ12	.633							.432		
RQ13	.418					.451	.450			
RQ14	.596									
RQ15	.636	.405								
RQ16	.642									
RQ17	.664									
RQ18	.623				.462					
RQ19						.475	.492			
RQ20	.545									
RQ21	.677									
RQ22										
RQ23			.521							
RQ24	.617									
RQ25	.410									
RQ26										
RQ27	.606									
RQ28	.515	.422								
RQ29							.449		.530	
RQ30	.565	.461								
RQ31	.556	.561								
RQ32		.507	.509							
RQ33		.568	.509							
RQ34				.413						

---

*Values less than .4 were not included since they generally were considered to be insignificant

TABLE III. ROTATED FACTOR PATTERN OF TEN FACTORS: VARIMAX

Variable	Factor 1	2	3	4	5	6	7	8	9	10
RQ1										
RQ2		.701								
RQ3		.683								
RQ4									.419	
RQ5		.616								
RQ6										.810
RQ7		.454								
RQ8									.824	
RQ9		.546								
RQ10										
RQ11						.483	.483		.503	
RQ12								.462		
RQ13						.814				
RQ14	.490					.609				
RQ15		.512							.481	
RQ16					.405	.474				
RQ17					.821					
RQ18					.855					
RQ19							.769			
RQ20					.694					
RQ21					.722					
RQ22		.461						.482		
RQ23				.715						
RQ24				.686						
RQ25				.661						
RQ26				.665						
RQ27	.522				.422					
RQ28	.742									
RQ29	.603									
RQ30	.589									
RQ31	.801									
RQ32			.881							
RQ33			.873							
RQ34								.575		

---

*Values less than .4 were not included since they generally were considered to be insignificant.

TABLE IV. FINAL ESTIMATES OF COMMUNALITIES FOR THE FIRST TEN VARIABLES AND EIGENVALUES: UNROTATED MATRIX

Variable	Factor	Estimated Communality	Eigenvalue	Percent of Variation	Commulated Percentage
RQ1	1	0.4154	8.7310	25.7	25.7
RQ2	2	0.6675	2.5819	7.6	33.3
RQ3	3	0.7867	2.3214	6.8	40.1
RQ4	4	0.6936	1.7456	5.1	45.2
RQ5	5	0.6918	1.6956	5.0	50.2
RQ6	6	0.7501	1.5164	4.5	54.7
RQ7	7	0.6339	1.3512	4.0	58.7
RQ8	8	0.7404	1.2964	3.8	62.5
RQ9	9	0.4747	1.2234	3.6	66.1
RQ10	10	0.7282	1.0533	3.1	69.2

DISCUSSION OF TEN FINAL COMMON FACTORS

The ten factors extracted from the analysis are summarized below:

Factor 1 - Strict requirements: Six variables were extracted as significant in forming this factor. The basic concern was with collateral requirements and repayment schedules.

Factor 2 - Excessive Red Tape: Seven variables were extracted as significant in forming this factor. No particular variable was outstanding in forming this factor.

Factor 3 - Can't borrow enough: The inability to borrow enough money to do much good was dominant in this factor. Only two variables were extracted as significant.

Factor 4 - Increased dependence on borrowing: Four variables were extracted as significant in forming this factor. All questions were centered around the importance of borrowing for survival. Results seem to suggest that farmers believe that it is necessary.

Factor 5 - Favor Merchant Policies: Respondents generally believe that it is easier to obtain credit from merchants and dealers than to borrow from commercial banks or government lending institutions. Six variables were significant in forming this factor.

Factor 6 - High Interest Rates: Four variables were significant in forming this factor relating to the attitude that interest rates are too high at commercial banks.

Factor 7 - Favor Commercial Banks: Compared with government lending institutions, respondents generally favor commercial banks. Only two variables were significant in forming this factor.

Factor 8 - Low Farm Prices: This factor perhaps does not fit with the other factors. A number of questions were raised relative to the general belief of fairness to limited resource farmers. Three variables were extracted as significant.

Factor 9 - Unaware: Four variables were extracted as significant in forming this factor. A number of questions were raised concerning the general awareness of farmers towards the various sources of loans that are available to them.

Factor 10 - Interest Rate Subsidy: Only one variable was significant in forming this factor. This variable was highly significant in forming this factor which suggests that the government should subsidize interest rates for limited resource farmers.

In summary, the ten final extracted factors cover a range of items associated with attitudes towards borrowing and opinions of credit policies and practices of lending institutions. The factors are fairly evenly divided between attitude and opinion. Factors 3, 5, 7, 9 and 10 are perhaps more of attitude whereas factors 1, 2, 4, 6 and 8 are mostly opinions. Where the variables associated with the respective factors to be separated and asked separately, the extractions would perhaps be different. The results seem to suggest that in terms of borrowing the farmers believe that the re requirements to borrow and the conditions or repayment schedules are too strict. Considering the socioeconomic and racial background of the respondents, this attitude may have been formed by certain experiences in the pasts. In terms of credit policies and practices, there seems to be an opinion that there is excessive red tape or complicated procedures that must be plowed through in getting a loan.

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APPENDIX: LIST OF VARIABLES USED IN FACTOR ANALYSIS QUESTIONNAIRE

Variable	Variable Description*
RQ1	I would borrow more
RQ2	Borrowing money too much red tape
RQ3	Institutional lenders favor big farmers
RQ4	Commercial lender's policies do not favor farmers
RQ5	Government interest rate subsidy for small farmers
RQ6	Government interest rate subsidy for all farmers
RQ7	Big farmers have an advantage
RQ8	Small farmers unaware
RQ9	FHA lending policies alright
RQ10	FHA policies need changes
RQ11	Commercial banks discriminate
RQ12	Government lenders discriminate
RQ13	Commercial banks interest rates too high
RQ14	Government interest rates too high
RQ15	Government loan subsidy to small farmers
RQ16	Government not serving small farmer needs
RQ17	Easier to borrow from M's & D's than bank
RQ18	Easier to borrow from M's & D's than Government
RQ19	Easier to borrow from bank than government
RQ20	Perfer to borrow from M's & D's than banks and government
RQ21	M's & D's lending practices more suitable than bank and government
RQ22	Borrowing more necessary for survival
RQ23	Borrowing more difficult now than before
RQ24	Farmers rely too much on borrowing
RQ25	Most farmers borrow too much
RQ26	Borrowing a must
RQ27	Bank collateral requirements too high
RQ28	Government collateral requirements too high
RQ29	M's & D's collateral requirements too high
RQ30	Bank repayment schedules too strict
RQ31	Government repayment schedules too strict
RQ32	Can't borrow enough to do much good
RQ33	If I could borrow I wouldn't have problems
RQ34	Farm prices are too low

*Variable descriptions are abbreviated

MINUTES

RURAL SOCIOLOGY SECTION
of the
SOUTHERN ASSOCIATION OF AGRICULTURAL SCIENTISTS

Minutes of the Annual Meeting
1980

The Rural Sociology Section business meeting was held February 5, 1980 in the Magestic Hotel in Hot Springs, Arkansas. Edward McLean, president, called the meeting to order at 3:12 p.m.

Ed McLean announced that this year's nominations committee consists of Charles L. Cleland and Virginia Purtle. He also discussed the financial situation of the Rural Sociology Section, pointing out that the cost of the Proceedings exceeds the registration fees by a considerable margin. Registration up to the business meeting totaled 38. Fourteen of those registered were students. McLean announced that the location of future meetings will be as follows:

1981 Atlanta
1982 Orlando

Possible locations for the 1983 and 1984 meetings were briefly discussed.

Gerry Wheelock and John Dunkelberger raised the issue of the Rural Sociology Section of SAAS becoming a formal organization. It was pointed out that the 1978 Proceedings contain a section (by Charles L. Cleland) which states the Rural Sociology Section policy and that this was not changed in 1979. Some discussion pursued as to whether the Section should become a formal organization and publish more "formal" proceedings. Art Cosby and Virginia Purtle said they prefer the *gemeinschaftliche* milieu which prevails under the present arrangement. George Ohlendorf concurred with their feelings and suggested that perhaps the Proceedings could be included in the Social Science Index. After some discussion Ohlendorf made a motion that the President-Elect look into the possibility of having the Proceedings indexed. The motion passed unanimously.

John Dunkelberger and Joe Molnar discussed review procedures for the Proceedings. Dunkelberger also suggested an earlier call for papers, say about September 1. Art Cosby suggested that there be more panels. After some discussion it was decided that the call for papers be earlier next year.

Ed McLean pointed out that if the Rural Section and the SAAS registration are to be held at the same time and place next year a formal request will have to be made. Cleland motioned that this practice continue. The motion passed unanimously.

Ed McLean read a letter from W. C. Boykin, President-Elect, explaining why he was unable to attend the meetings.

Nominations for officers for 1981 were made by Charles Cleland as follows:

President: William C. Boykin, Alcorn State University
President-Elect: Wolfgang Frese, Mississippi State University
Program Chairman: Gerald Wheelock, Alabama A&M University
Program Chairman-Elect: Ronald Wimberley, North Carolina State University

The motion was seconded by Ray Sollie. The motion passed. John Dunkelberger moved that the officers be elected by acclamation. The motion passed.

Dunkelberger asked if the Program Chairman needs help with his duties. A discussion of whether to spread out the work load among the various officers was discussed.

Ed McLean pointed out that the president is responsible for the Rural Sociology Section money, however, he could not turn it over to Bill Boykin because he was unable to attend. McLean motioned that Frese, President-Elect, handle the money for next year. The motion passed.

Ed Moe discussed the Carter report on rural America and left some copies for those interested. He pointed out that they were going through it step by step to see where the research potential lies. Moe said if anyone had any ideas, especially dealing with research to back up policy, to get in touch with him. He also stated that there were four field trips dealing with rural research scheduled for the 1980 Rural Sociological Society meetings in Ithaca, New York.

The meeting was adjourned.

Edward McLean, President
Wolfgang Frese, Scribe

1980 ANNUAL MEETING PROGRAM

PROGRAM FOR THE 1980 RURAL SOCIOLOGY SECTION OF THE ANNUAL SOUTHERN ASSOCIATION OF AGRICULTURAL SCIENTISTS

FEBRUARY 3-6, 1980

MAJESTIC HOTEL, HOT SPRINGS, ARKANSAS

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SESSION A

RURAL STRUCTURE AND PROCESS

Presiding: Carlton R. Sollie, Mississippi State University

TRENDS IN MEASUREMENT OF COUNTY AGRICULTURAL STRUCTURE, Ronald C. Wimberly, North Carolina State University.

COUNTY DIFFERENTIATION AS A MEASURE OF COUNTY DEVELOPMENT, Glenn C. McCann, North Carolina State University.

THE AMERICAN AGRICULTURE MOVEMENT: MANIFEST AND LATENT PARTICIPANT ATTRACTIONS IN A SOCIAL MOVEMENT, Gary S. Foster, Kansas State University.

FARMS AND FARMERS IN MISSISSIPPI: SHORT TERM AND LONG TERM CHANGES IN THE STATE AND ITS COUNTIES, Ellen Bryant, Mississippi State University.

Discussant: Edward McLean, Clemson University

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SESSION B

INDUSTRIALIZATION

Presiding: Edward O. Moe, SEA/USDA

BLACK AND WHITE LEADER PERSPECTIVES ON RURAL INDUSTRIALIZATION: PROCESS AND CONTENT DIMENSIONS, D. C. Batchel and J. J. Molnar, Auburn University.

THE IMPACT OF NONFARM OCCUPATION AND INDUSTRY ON THE SIZE AND SCALE OF PART-TIME FARMS, Milton C. Coughenour, University of Kentucky.

SOME SOCIAL AND DEMOGRAPHIC PATTERNS IN MISSISSIPPI INDUSTRIAL EMPLOYMENT, Eunice R. McCulloch and Louis H. Bluhm, Mississippi State University.

Discussant: Eddie D. Wynn, Clemson University

SESSION C

MIGRATION

Presiding: Mohammed El Attar, Mississippi State University

CONSEQUENCES OF MIGRATION FOR THE SOCIOECONOMIC STRUCTURE AND INSTITUTIONAL STRUCTURE OF COMMUNITIES, Keith A. Carter and Lionel J. Beaulieu, University of Florida.

REPORT ON A COMPARATIVE STUDY OF MINORITY GROUP INTEGRATION: MEXICANS IN TEXAS AND TURKS IN SELECTED GERMAN CITIES, W. G. Roessler, Texas A & M University.

WAGES AND MIGRATION OF THE SOUTHERN LABOR FORCE: A DUAL PANEL STUDY--1960 AND 1970, Gerald Wheelock, Alabama A & M University; Virginia Caples, Alabama A & M University; Sheng-yung Li, Virginia State College; M. S. Dhaliwal, Alcorn State University; Woong K. Cho, Alcorn State University; and Tex L. Boggs, Kentucky State University.

Discussant: John V. D. Saunders, Mississippi State University

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SESSION D

HEALTH AND ALCOHOL

Presiding: Joseph J. Molnar, Auburn University

COUNTRY-TOWN DIFFERENCES IN HEALTH CARE MANAGEMENT AND ALCOHOLISM TREATMENT IN A MISSISSIPPI CATCHMENT AREA, Mary E. Benjamin, Rommel Benjamin and Frances Bright, Jackson State University.

RURAL HEALTH AND ILLNESS BEHAVIOR: A COMPARATIVE STUDY OF RURAL APPALACHIAN AND RURAL NON-APPALACHIAN RESIDENTS IN OHIO, Helena R. Lupidi, North Carolina Agricultural and Technical State University.

SOME DEMOGRAPHIC AND PERSONALITY CHARACTERISTICS OF DWI OFFENDERS IN A RURAL SETTING, Harsha N. Mookherjee, Tennessee Technological University.

SESSION E

QUALITY OF LIFE

Presiding: Robert S. Pomeroy, Clemson University

PERCEPTIONS OF THE FUTURE: THE EFFECTS OF FAMILY STRUCTURE AND LEVEL OF LIVING, Gail S. Andol and Louis H. Bluhm, Mississippi State University.

EDUCATIONAL LEVEL AMONG HOUSEHOLD HEADS OF SOUTHWEST MISSISSIPPI AS IT RELATES TO STANDARDS OF LIVING, Ivory Lyles and Alfred Stewart, Alcorn State University.

COMMUNITY ASSESSMENT STUDIES: VIEWS FROM YOUTH, INFLUENTIAL, AND HOUSEHOLD SAMPLE RESPONDENTS, Ernest J. Bowen and Edward L. McLean, Clemson University.

WORK ENVIRONMENT AS A FACTOR OF QUALITY OF LIFE IN SELECTED RURAL COUNTIES OF MIDDLE GEORGIA, Nathaniel B. Brown, Jr., Melvin E. Walker, Jr., and Mary L. Jones, The Fort Valley State College.

Discussant: Charles Cleland, University of Tennessee

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SESSION F

OCCUPATIONS AND WORK

Presiding: Joseph L. Molnar, Auburn University

TRAVEL TO WORK PATTERNS AMONG MALE AND FEMALE RURAL RESIDENTS, Clifton D. Bryant, Charles J. Dudley and Donald J. Shoemaker, Virginia Polytechnic Institute and State University.

SOCIAL DETERMINANTS OF RURAL YOUTH IN THE SELECTION OF AGRICULTURALLY-RELATED OCCUPATIONS IN ARKANSAS, Shirley M. Callaway, University of Arkansas at Pine Bluff.

CHARACTERISTICS OF BEGINNING FARMERS IN THE NORTH CENTRAL REGION: A LONGITUDINAL VIEW OF GOALS AND PROBLEMS, John P. Smith, William Heffernan and Gary V. Cole, University of Missouri.

NATURAL DISASTER AND FARMING: A NEGLECTED AREA OF RESEARCH, Orville R. Cunningham and Quentin A. L. Jenkins, Louisiana State University.

SESSION G

APPLIED SOCIOLOGY

Presiding: John Dunkelberger, Auburn University

THE IMPACT OF ELDERLY-TARGETED PROGRAMS IN TWO WESTERN ARKANSAS COUNTIES, Diana Danforth, Mary Jo Schneider and Donald E. Voth, University of Arkansas.

PROVIDING OPERATIONAL RESEARCH TO COMMUNITY DECISION MAKERS, William W. Linder and Pamela H. Rodgers, Southern Rural Development Center, Mississippi State University.

AN ASSESSMENT OF CITIZEN PARTICIPATION IN NATURAL RESOURCE PLANNING AND DECISION-MAKING, Sally Purohit, Auburn University.

FACTORS ASSOCIATED WITH DIFFERENT EXTENSION PROGRAMMING APPROACHES, C. L. Taylor and W. R. Summerhill, University of Florida.

Discussant: Arthur Cosby, Texas A&M University

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SESSION H

EDUCATION

Presiding: Frank M. Howell, Mississippi State University

TWO PATHS INTO HOME ECONOMICS: A STUDY OF BLACK AND WHITE WOMEN IN 1890 AND 1862 LAND GRANT UNIVERSITIES, Vickie Lenoir, Betty Stout, Treva Babcock, Anne Huber and Thomas A. Lyson, Clemson University and Winthrop College.

EDUCATIONAL ASPIRATIONS OF RURAL YOUTH IN 1972: A COMPARISON OF LOUISIANA HIGH SCHOOL SENIORS WITH NLS CLASS, George W. Ohlendorf and Donna M. Rafferty, Louisiana State University.

SOUTHERN URBAN AGGIES: A PRELIMINARY LOOK, F. Dale Parent, and Wolfgang Frese, Mississippi State University.

STUDENT ACHIEVEMENT TEST SCORES IN ALABAMA: RURAL AND URBAN SCHOOLS, Mary Soderberg and John Dunkelberger, Auburn University.

Discussant: Virginia Purtle, Louisiana State University

SESSION I

NETWORK ANALYSIS: INTERPERSONAL INFLUENCE IN DECISION MAKING (S-120)

Presiding: Glenn C. McCann, North Carolina State University

INFLUENCING THE LOCAL DECISION MAKING PROCESS: THE ROLE OF INTERORGANIZATIONAL LEADERS, Lionel J. Beaulieu, University of Florida.

USING ACTOR ACCOUNTS TO CONSTRUCT INFLUENCE NETWORKS: PROBLEMS AND SUGGESTIONS, Forrest A. Deseran, Robert Mullen and Lisa Black, Louisiana State University.

INTERPERSONAL SOCIOMETRIC NETWORKS AND INFLUENCE RANKING: IMPLICATIONS FOR COMMUNITY DEVELOPMENT, Max H. Miller and Rusty Brooks, University of Georgia.

SOCIAL AND DEMOGRAPHIC CHARACTERISTICS OF COUNTY LEADERSHIP IN THE RURAL SOUTH, Calvin L. Van Landingham, Auburn University.

THE ROLE OF FORMAL ORGANIZATIONS IN THE DEVELOPMENT OF LOW INCOME NON-METROPOLITAN COUNTIES IN THE SOUTH, Bert Gullett, Donal E. Voth and Michael K. Miller, University of Arkansas.

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SESSION J

POVERTY

Presiding: A. W. Baird, Mississippi State University

FACTORS ASSOCIATED WITH FAMILIES ESCAPING POVERTY IN NINETEEN MIDDLE GEORGIA COUNTIES, E. Y. Beauford, M. E. Walker and M. C. Nelson, The Fort Valley State College.

POVERTY, FEMALE-HEADED HOUSEHOLDS, AND SOCIAL POLICY: SOME OBSERVATIONS AND REFLECTIONS, Satish Sharma and Helen Ormsby, University of Iowa.

AGE OF HOUSEHOLD HEAD AS IT RELATES TO HOUSING AND SEVERAL OTHER SOCIO-ECONOMIC CONDITIONS IN SOUTHWEST MISSISSIPPI, Alfred Stewart, Alcorn State University.

EFFECTS OF A HUMAN RESOURCES DEVELOPMENT PROGRAM ON THE ECONOMIC STATUS OF PUBLIC ASSISTANCE RECIPIENTS IN RURAL AREAS, W. R. Summerhill and C. L. Taylor, University of Florida.

Discussant: D. C. Batchel, Auburn University

SESSION K

STATUS ASPIRATIONS AND ATTAINMENTS

Presiding: Thomas A. Lyson, Clemson University

OCCUPATIONAL ASPIRATIONS OF RURAL YOUTH IN 1972: A COMPARISON OF LOUISIANA HIGH SCHOOL SENIORS WITH THE NLS CLASS, Donna M. Rafferty and George W. Ohlendorf, Louisiana State University.

ASPIRATION AND ATTAINMENT: A PRELIMINARY VIEW OF THE ALABAMA YOUTH PANEL, 1966-1979, Steve Haynes and John Dunkelberger, Auburn University.

RESIDENTIAL AND MOBILITY PREFERENCES IN THE FORMATION OF LIFE PLANS, Frank M. Howell, Mississippi State University.

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SESSION L

POTPOURRI

Presiding: George W. Ohlendorf, Louisiana State University

ORIENTATIONS TOWARD INTERNATIONAL SERVICE: A STUDY OF THE PERCEPTIONS OF AGRICULTURAL PROFESSIONALS, Gloria J. Boyd and Arthur G. Cosby, Texas A & M University.

FACTORS ASSOCIATED WITH INTERACTION PATTERNS BETWEEN COLLEGE STUDENTS AND GRANDPARENTS, Vernice LaDonna Stockton and Elisabeth J. Stojanovic, Mississippi State University.

RURAL SOCIOLOGY IN THE 1980's: POSITIVISTIC OR APPLIED?, Wayne A. White, Kansas State University.

THE CRITERIA DILEMMA AND EVALUATING EXTENSION PROGRAMS, C. L. Taylor and W. R. Summerhill, University of Florida.

SESSION M

CONSUMERS

Presiding: Edward McLean, Clemson University

MEASURING CITIZEN AND SHOPPER PREFERENCES AND ATTITUDES FOR DOWNTOWN IMPROVEMENT PROJECTS, Robert S. Pomeroy and Ernest J. Bowen, Clemson University.

ATTITUDES TOWARD BORROWING AND OPINIONS OF CREDIT POLICIES AND PRACTICES OF LENDING INSTITUTIONS BY LIMITED RESOURCE FARMERS, Alfred L. Parks, Thaddues McDonald and Bobby J. Mixon, Prairie View A & M University.

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SESSION N

RURAL ORGANIZATIONAL STRUCTURE: SOME PROSPECTS FOR REGIONAL RESEARCH

(SPECIAL PANEL)

Presiding: H. Max Miller, University of Georgia

Panel: Open Discussion

Area of Work: Interdisciplinary regional research involving local governments in rural areas - financing local government and public administration.

1980 Participants

Rural Sociology Section

s *Gail S. Andol*
Sociology Department
Drawer C
Mississipi State, MS 39762

Lionel "Bo" Beaulieu
119 Roufs Hall-IFAS
Univ. of Florida
Gainesville, FL 32611

s *Lisa Black*
Sociology-Rural Sociology
Louisiana State University
Baton Rouge, LA 70803

s *Gloria Boyd*
106 Southland Street
Texas A & M University
College Station, TX 77840

s *Ernest Joel Bowen*
Dept. of Ag. Econ. & Rural Soc.
Clemson University
Clemson, SC 29631

s *Rusty Brooks*
Department of Sociology
Baldwin Hall
University of Georgia
Athens, GA 30602

Clifton D. Bryant
Department of Sociology
VPI & SU
Blacksburg, VA 24061

Ellen S. Bryant
Box 1597
Mississippi State, MS 39762

s *Shirley Callaway*
Department of Agriculture
University of Arkansas
Pine Bluff, AR 71603

Keith A. Carter
University of Florida
Gainesville, FL 32601

Woong K. Cho
Alcorn State University
Lorman, MS 39096

Charles L. Cleland
247 UT Center
University of Tennessee
Knoxville, TN 37916

Arthur G. Cosby
Rural Sociology
Texas A & M University
College Station, TX 77843

C. M. Coughenour
S205 Ag. Sci. North
Department of Sociology
University of Kentucky
Lexington, KY 40502

Orville R. Cunningham
Sociology and Rural Sociology
Louisiana State University
Baton Rouge, LA 70803

Forest A. Deseran
Department of Sociology
Louisiana State University
Baton Rouge, LA 70803

M. S. Dhaliwal
Alcorn State University
Lorman, MS 39096

J. E. Dunkelberger
Department of Rural Sociology
Auburn University
Auburn, AL 36830

M. El-Attar
P. O. Box 2213
Mississippi State, MS 39762

J. Edwin Farris
Dept. of Ag. Econ. & Rural Soc.
Barre Hall
Clemson University
Clemson, SC 29632

Wolfgang Frese
Department of Sociology
Drawer C
Mississippi State, MS 39762

Duane A. Gill
Department of Sociology
Kansas State University
Manhattan, KS 66506

s *Bert Gullett*
Dept. of Ag. Econ. & Rural Soc.
University of Arkansas
Fayetteville, AR 72701

Lititia Hatcher
Department of Sociology
Tennessee State University
Nashville, TN 37203

s *Steve Haynes*
#89 Barron's Trailer Ct.
Auburn, AL 36830

Frank M. Howell
Department of Sociology
Drawer C
Mississippi State, MS 39762

Harold F. Kaufman
Box 5161
Mississippi State, MS 39762

Vickie R. LeNoir
Dept. of Ag. Econ. & Rural Soc.
Clemson Univ.
Clemson, SC 29631

Stephen Lilley
N.C. Extension Program
N.C. A&T State University
P. O. Box 21928
Greensboro, NC 27420

Gwendolyn Lu
University of Arkansas
Department of Agriculture
P. O. Box 5311
Pine Bluff, AR 71611

Helen Lupidi
Dept. of Ag. Econ. & Rural Soc.
Carver Hall, Rm. 165
Greensboro, NC 27411

Glenn C. McCann
Dept. of Soc. & Anthropology
NCSU
P. O. Box 5420
Raleigh, NC 27650

s *Eunice McCulloch*
102 Murdock Lane
Starkville, MS 39759

Edward L. McLean
Dept. of Ag. Econ. & Rural Soc.
Barre Hall
Clemson University
Clemson, SC 29631

H. Max Miller
Department of Sociology
University of Georgia
Athens, GA 30602

Edward O. Moe
SEA-CR-USDA
14th & Independence
Washington, D.C. 20250

Joe Molnar
Department of Rural Sociology
Auburn University
Auburn, AL 38630

George W. Ohlendorf
Sociology & Rural Sociology
Louisiana State University
Baton Rouge, LA 70803

Sally Purohit
Dept. of Ag. Econ. & Rural Soc.
Auburn University
Auburn, AL 38630

Virginia Purtle
Department of Sociology
Louisiana State University
Baton Rouge, LA 70803

s *Donna M. Rafferty*
Sociology & Rural Sociology
Louisiana State Unviersity
Baton Rouge, LA 70803

Pamela Rodgers
SRDC
82 Plaza
Starkville, MS 39759

s *Mohammad M. Sadeh*
33-I University Village
Starkville, MS 39759

John Saunders
Sociology Department
Drawer C
Mississippi State, MS 39762

s *Richard Shafer*
329 N. Washington Avenue
Fayetteville, AR 72701

Satish Sharma
3205 Lakeside Manor
Iowa City, IA 52240

s *Nancy E. Smith*
218B Agri. Bldg.
University of Arkansas
Fayetteville, AR 72701

s *Mary A Soderberg*
4707 Buckeye Road
Madison, WI 53716

s *Vernice L. Stockton*
103 N. Nash, Apt. K
Starkville, MS 39759

Annie Taylor
P. O. Box 479
Alcorn State University
Lorman, MS 39096

C. L. Taylor
313 Rolfs Hall
University of Florida
Gainesville, FL 32615

Gerald Wheelock
Box 12
Alabama A&M
Normal, AL 35762

s *Wayne A. White*
Department of Sociology
Waters 239
Kansas State University
Manhattan, KS 66506

Ron Wimberley
Department of Sociology
N.C. State University
Raleigh, NC 27650

Eddie D. Wynn
Dept. of Ag. Econ. & Rural Soc.
Clemson University
Clemson, SC 29631

s = student